

From: @hotmail.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 4, 2019 12:43:04 PM

Project: replacement_effluent_treatment_facility_project Comments: This project can not go ahead, the proposed pipe line will destroy our strait. It's not a job vs job situation, it's about the environment. Even if it was about jobs, there would be far more jobs lost in the fishing and tourism industry. This affects 3 provinces and all 3 depend on clean water to fish and attract tourists. Nova Scotia is Canada's ocean playground, this pipe will ruin everything Nova Scotia is known for. People already avoid swimming in Pictou and Lyons brook because the mill has contaminated those waters even with the smaller amount of effluent going in. Northern pulp constantly says the effluent is treated but will not disclose what is actually in it. The millions of litres of effluent will be too warm for any salt water marine species to survive, marine life is very sensitive to change and this would be a sudden change. It will be a larger version of boat Harbour. If the mill wants to continue, I believe, along with many others, that we should switch to hemp products. It's more environmentally friendly, grows faster and produces more products. We've got to start thinking about the environment more and less about money, with time money will come but the environment is already on the verge of being destroyed. Name: Email:

@hotmail.ca Address:

: Privacy-Statement:

agree x: 77 y: 27

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Proposed Effluent Pipe into Caribou Harbour
Date: March 4, 2019 1:08:41 PM
Attachments: [Submission to Northern Pulp Environmental Assesement re Rock Crab.pdf](#)

March 4, 2019

Re: Northern Pulp Replacement Effluent Treatment Facility Environmental Assessment

My name is . I have been a fisherman for years. I fish in and around the area of Caribou Harbour and have great concern over the possibility of an effluent pipe in this area.

Caribou Harbour is one of the largest rock crab nurseries in the Eastern Gulf. It contains millions of female and juvenile crab. I have fished rock crab for several years. I fish Hillsborough, PEI and from Wallace Harbour to Caribou Harbour in Nova Scotia. Female crab can be found in all the bays and inlets, but for some reason Caribou Harbour holds a far greater number of female and juvenile crab than all the other areas.

The survival of the lobster industry in this end of the Strait depends on the health of this rock crab nursery. Crab is the main food supply for lobster.

I am concerned about the potential impact of a pipe carrying and **continuously discharging up to 3 million litres an hour** of effluent through three diffusers, and the potential that this will produce noise and/or vibration that would disturb marine life.

I would like to draw the Minister's attention to the potential impact of noise and/or vibration from the diffusers on the marine species in Caribou Harbour and surrounding area. This issue has not been addressed in Northern Pulp's submission. I believe this issue must be fully addressed before any approval is given. Noise and vibration can carry long distances under water and change conditions which make a habitat favourable for many species.

I also believe that Northern Pulp's plan to excavate a trench through the centre of this very special eco-system may disrupt the fishery in this area.

The DFO description of Scallop Buffer Zone 21, 22 and 24, which runs 1 nautical mile from the nearest point of land and includes the entire proposed pipeline and outfall, states that the ecological components of interest protected by the buffer zone are "juvenile American lobster and habitat that is important to biodiversity" and states "specifically American lobster nursery habitat is important for the life-cycle of the species."

The description also states, "No other human activities that take place in this area are incompatible with the conservation of the ecological components of interest" and that "These closures offer protection to other important species and habitats in the southern Gulf of St. Lawrence." As an example, DFO refers to SFA 22 containing "rock crab (an important prey for several species and a commercial species." <http://www.dfo-mpo.gc.ca/oceans/oeabcm-amcepz/refuges/sfa-zpp-eng.html>

Caribou Harbour is home to the largest commercial fishing fleet in the Northumberland Strait. The strong lobster catches in this area are the result of the continuous food supply from the rock crab nursery. The potential destruction of this crab habitat will have devastating consequences on the lobster industry in this area. No studies have been done on the possible effect noise and/or vibration from this effluent pipe could have on local marine life. When foreign material is dumped into the environment, it will have an effect. Sometimes it takes years to realize how big that effect will be and then it is too late to fix it. Northern Pulp needs do something environmentally friendly, not something that is economically beneficial to themselves.

Sincerely,

hotmail.com

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 4, 2019 1:31:32 PM

Project: replacement_effluent_treatment_facility_project Comments: I strongly recommend that the replacement effluent treatment facility project be approved by the Nova Scotia Department of Environment. In the Executive Summary there is no significant residual environmental effect predicted. The summary states that under worse case conditions water Quality at the end of the mixing zone for the three port diffuser will reach ambient conditions within less than two meters from the diffuser in terms of total nitrogen, total phosphorous, total suspended solids, dissolved oxygen, pH and salinity. Colour will return to baseline conditions within five meters of the diffuser. Temperature will be within 0.1 degrees Celsius of background at the end of the 100 meter mixing zone. The summary states the wastewater treatment facility projects the effect on the environment during all phases is rated as not significant. I strongly recommend that your decision will be to approve this project. I believe your decision should be based on the science presented in this environmental assessment registration document. It should not be based on the unsubstantiated arguments of fear. Name:

Email: @hotmail.com Address:

Privacy-Statement: agree x: 63 y: 15

From: (HorizonNB)
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 4, 2019 2:02:38 PM

Dear Honourable Margaret Miller,

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project.

I recently completed my Ph.D. in Clinical Psychology and am currently practicing as a Resident in Psychology in New Brunswick, with plans to return to Nova Scotia. I grew up just outside of Pictou in the community of Braeshore, where I spent summer months exploring the surrounding beaches and swimming in the Northumberland Strait. The Effluent Treatment Facility Project is of great personal significance because my husband and I recently purchased waterfront property in Braeshore.

The allocated one-month time period is insufficient for me to comprehensively read and critically analyze the 600+ page document prepared by Dillon Consulting for Northern Pulp. However, in my review thus far, one summary section of the report caught my attention. In Appendix E3 the conclusions section states the following:

“Among the four potential outfall locations discussed in this study for the discharge of the effluent, the Alt-D outfall location provides the smallest potential long-term cumulative effects on the fishery and socio-economic environments, and therefore is considered the better outfall location for the discharge of the treated wastewater from the mill.”

This statement indicates that there is potential for long-term, negative effects of the proposed outfall location. I would suggest that it is not acceptable to select this option simply because it provides the “smallest” risk of four options presented by Northern Pulp. Are we limited to these options? I would like to see more comprehensive information regarding the feasibility of a treatment facility that is contained on site and has no discharge pipe into the Northumberland Strait.

Sincerely,

Dr. Everett Chalmers Hospital
Horizon Health Network

From:
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 4, 2019 3:20:16 PM

Project: replacement_effluent_treatment_facility_project Comments: Dear Minister of Environment I have a trucking business that employs 40 employees and depend on Northern Pulp to keep every one receiving a pay cheque so they can buy groceries and make house payments, car payments and all the other expenditures that go with every day living. I ask that you ignore all the fake news that is going around and make your assessment on Science and the fact that the effluent has gone into the Strait for the last 52 years and there has not been a fish kill in its history. We know that there are fish living in Boat Harbour now so with the new Wastewater Treatment Facility and where it is proposed to go will ensure a very acceptable Environment. Name: Email

Privacy-Statement: agree x: 58 y: 19

From: Environment Assessment Web Account
To: Northern Pulp's new ETF
Subject: March 4, 2019 3:44:09 PM
Date:

Minister Margaret Miller
Dept of Environment

I am writing today in regard to Northern Pulp's replacement Effluent Treatment Facility.

As a wife and mother, i have grave concerns regarding their plan to place a pipe into the Northumberland Strait.

1. Air Pollution:

In 2003, my husband and i built a new home in Three Brooks, maybe 8 km from the Town of Pictou and 5 km from the Caribou Ferry Terminal where this proposed pipe will enter the Strait. Shortly after moving into our new home in 2003, our son He had zero issues prior to the move.

"In 2012, Northern Pulp reported to NPRI the release of 1,011 tonnes of fine particulate matter into the atmosphere. Remember, this is the deadliest kind of particulate, the kind that can get lodged in your lungs forever. One industry insider noted it was like having 37 Irving mills worth of fine particulates. In fact, NPRI data shows that in 2012 Northern Pulp was the highest emitter in Canada of seven substances, including Total Reduced Sulphur (TRS), Total Particulate Matter, PM10 and PM2.5. Stack tests from November 2013 showed the mill was producing emissions 78 per cent above what was allowed." (<https://www.halifaxexaminer.ca/province-house/dirty-dealing-3/#Living%20Downwind%20Dangerous>)

Now, under their new effluent treatment facility, their plan is to burn the activated sludge in their power boiler. I fear this will only increase their emissions and based on their past history, i have zero faith they will keep it within regulatory limits. After reviewing their new Environmental Assessment submitted to the Province of NS, it appears they won't even have an air monitoring station in the Town of Pictou which is directly across the water from the mill. This is unacceptable!

Why doesn't Northern Pulp have to have "Continuous Emissions Monitoring" CEM on all of their stacks like other mills in Canada are required to do with live streaming to a website for everyone to see exactly what chemical compounds are being released and whether or not they are surpassing the risk thresholds?

2) Water Pollution / Economic Impact

My husband is a self employed commercial fisherman in the Northumberland Strait. His fishing grounds are in the immediate area of where the outfall of this pipe will be located. We are hearing there will be a 'no fish zone' of 3 square km around the outfall of the pipe.

So, essentially, my husband and his gear will be displaced as a result. So, is he supposed to move to another location on top of other fishers?

As a family we have invested hundreds of thousands of dollars into this business. If a pipe is permitted to dump millions of litres of effluent per day into the Northumberland Strait, fisherman in all 3 Provinces will suffer financial impact.

As soon as the effluent starts pumping in, I suspect they will lose certification as Atlantic Canadian lobster is certified to be coming from clean, pollution free waters. The loss of this certification will impact markets globally and the prices will no doubt drop. Considering Seafood is one of our biggest exports in the Province of NS, worth over a billion dollars, is it worth the risk? Will there be a compensation package to all fishermen in the Strait?

In the Environmental Assessment document from Northern Pulp, Table E. 1. 1-1 shows the Summary of the Significance of Project Related Residual Environmental Effects relating to fish and fish habitat. In every possible category, Northern Pulp shows "NS" which means "No Significant Residual Environmental Effect". WOW! What are the chances of that?

In every single category they predict "No Significant Residual Effect";

how convenient! Dumping up to 70 million litres of effluent into the ocean, 24 hours per day, 7 days per week, 365 days per year..... Non stop. Common sense would tell you that HAS to have some residual impact! To my knowledge, Northern Pulp have NOT studied what the effects effluent will have on Lobster Larvae or Herring eggs or Juvenile Rock Crab; let alone Tuna, Porpoises, or Whales. In fact, they state in the Environmental Assessment document that they don't know for sure what composition the effluent will be. They "anticipate" it will meet federal guidelines. And if it doesn't? Does the Strait become the next Boat Harbour? How do you clean up an ocean where its not contained?

All the regulations put in place in the past year to try to save the North Atlantic Right Whales in the Gulf of St. Lawrence, yet allowing Northern Pulp's plan will mean they will swim through toxic waste water flushed into the Strait. What long term effects will this have on them? Will it kill the majority of plankton they eat? Will it impact their already low reproduction rates? The World is watching after so many of these whales died in US and Canadian waters in the past few years. Will the World approve of Canadian authorities allowing them to be poisoned?

Northern Pulp have stated they are confident they can meet the federal pulp and paper regulations. Supposedly all they have to do is pass the acute lethality test where they put effluent into a bucket with some trout. If more than half survive after so many hours, it passes.

It concerns me that our federal regulations have not been updated in over 20 years.

As well, Northern Pulp's plan is not to dump into a fresh-water River, they are wanting to dump into an ocean; so why wouldn't the test be in relation to species in the ocean like lobster larvae, herring eggs, plankton, etc.

Minister Miller, I urge you to reject this proposal Or at the very least send it for a Federal assessment

Recently it was announced that Boat Harbour Remediation will require a federal assessment. This company helped pollute Boat Harbour. So, in turn, it should require a federal assessment to dump that toxic waste into the Strait.

- Impact on 3 Provinces
- Financial impacts on 1000's of independent business owners
- Impact on Species at Risk in the Strait
- Impact to First Nations who fish there as well
- Same plan was denied by the Feds twice before
- Proponent has completed NO science of the impacts to fish and fish habitat
- did NOT hold any public information sessions after they changed their planned route from Pictou Harbour to Caribou Harbour
- Province of NS cannot conduct this Environmental Assessment without bias as they are also financing the project and have an enormous conflict of interest considering the Indemnity Agreement signed with this company

From:
To: [Environment Assessment Web Account](#)
Subject: Replacement Effluent Treatment Facility - EA
Date: March 4, 2019 3:56:29 PM

Dear Minister,

Please accept this communication in response to Northern Pulp's Environmental Assessment for the Replacement Effluent Treatment Facility Project. My name is . I am the General Manager of the Pictou Lodge Beach Resort, President of Destination Eastern and Northumberland Shores, Board of Directors Tourism Industry of Nova Scotia, and Chair of the Nova Scotia Tourism Human Resource Council.

I have many concerns about Northern Pulp's Environmental Assessment, but will focus my communication on the following points:

- 1 - Effect on Tourism and the socio-economic impact.
- 2 - Issues in Engagement

1 - The socio-economic impact and the effect on tourism

As per the Nova Scotia Environment Act, Purpose of Act, section A:

The purpose of this Act is to support and promote the protection, enhancement and prudent use of the environment while recognizing the following goals: (a) maintaining environmental protection as essential to the integrity of ecosystems, human health and the socio-economic well-being of society;

In the EA submission section 8.14.4.2 it is stated:

The daily operation and regular maintenance of the project is not anticipated to impact the socio economic environment.

AND

No impact to community use of recreational areas is anticipated from the operation of the outfall. Additionally, odour prevention was a basic design criteria used in the development of each stage of the ETF process. Through employing a process that has, for example, continuous sludge removal, subsurface air injectors, and indirect effluent cooling, odour is controlled during the treatment process. No impact to community is anticipated from odour during the operation of the ETF.

My concerns here are two fold:

1 - Risk of impact to waters

I am concerned with the lack of studies around the economic impact this project could have on the tourism industry. Tourism produced 2.8 billion dollars in revenues in Nova Scotia in 2018. Northumberland Shore area typically makes up 8% of this total. The Pictou Lodge Beach Resort (built in 1924) is located about 5km down the strait from the proposed outfall area. The resort has been built to a 2.8 million dollar business that employs 70 people. According to the 2017 NS Tourism Visitor Exit Survey, the top reasons pleasure tourists visit Nova Scotia are “Coastal Sightseeing - 47%” and “Visit a Beach - 49%”. Lobster remains an important part of the visitors experience as well. 45% of pleasure visitors to the province in 2017 ate lobster while here.

From a destination marketing perspective, the Northumberland Shore has always lead with the beaches in our area. Northumberland Strait’s unique selling point is that our beach waters are swimmable reaching as high as 25 degrees Celsius.

The impact of dumping millions of litres of effluent into the Strait will be harmful to our branding efforts and will have a negative impact on tourism businesses in the area. We are a destination that primarily sells warm swimmable waters and fresh local seafood. Nova Scotia is traditionally known as Canada’s Ocean Playground. The impact of this pollution could affect Nova Scotia’s tourism brand as a whole. It could also have negative impacts on the lobster brand for Northumberland Strait and Nova Scotia in general.

The lack of a study around economic impact and tourism impact for the Northumberland Shore and Nova Scotia is a major concern. This is cause enough for the Minister of Environment to order an environmental assessment report for the new treatment plant and subsequent effluent outfall. This report needs to include a socio-economic impact study on the tourism industry.

2 - Air quality issues.

In section 8.1.2.2 the EA claims that odours are impossible to address as the new odour coming from new treatment plant will not be known until such time as the plant starts to operate. Until the new chemicals and compounds are combined. It also states that this issue is subjective and will quite possibly not be worse than current.

It also states that “Because the perception of odour and its effects are subjective and relative to an individual’s perceptions, limits, and tolerances, it is more frequently treated as a nuisance issue”.

The current state of air quality and odours produced from the plant have had a negative

socio-economic impact on the community. In my tourism operation we have lost long term guests who had to leave because of poor air quality. We have lost potential group bookings and weddings because of the air quality on the day of planning visits and tours. The local town has lost residents and potential investors because of the air quality. There is no current study on what the economic impact the poor air quality and odour produced by mill has had on tourism industry and economic development in the community over the last 50 years. This is of concern to me.

I would argue it is more than a “nuisance issue” when air quality and odours are recorded and publicly displayed on trip planning sites such as TripAdvisor. This has a real impact on potential travel and booking decisions. For example:

Lovely spot - except for the smell

Review of [Pictou Lodge Beachfront Resort](#)

Reviewed October 12, 2015

We only stated for a brief overnight visit and didn't get to fully appreciate this resort. Desk staff very pleasant and helpful, supper in the pub area delicious with the server going out of her way to make us comfortable. Room clean with usual facilities you would expect.

However, there is a continuous smell in the air which at first we thought was sewage, but were told it is the emissions of the local pulp mill. This is disappointing as the location and facilities at this resort are lovely and it is very convenient for catching the ferry to Prince Edward Island (10 mins to the terminal). My mother and I were very relieved that we did not have to stay for longer and if we had booked for longer would have probably checked out and found someone else. I am sorry for the poor review as the problems are largely outside the control of the owners, but hope this will help their cause in trying to get the Mill to clean up its act.

Date of stay: October 2015

In addition to the current air issues, the new treatment plant will include the combustion of sludge generated in the replacement ETF for energy recovery. Emissions from the combustion of sludge in the power boiler during operation and maintenance is to be dispersed from mill stacks. A socio-economic study into what the impact of the poor air quality will have on local businesses and residents needs to be done before construction of the new treatment plant begins. As a local business operator and resident I insist the Minister of Environment order a environmental assessment report.

2 - Lack of Public Consultation

Under the section 6.0 Public Engagement I take issue with the following points:

6.2.5 - Engagement with Government.

At no time was the Provincial Department of Business, Tourism Nova Scotia, or the Minister of the Department mentioned here. The potential impact on the tourism industry is the same as the forestry and fisheries industries. On several occasions I had written to the Minister with my concerns on the impact of tourism. An environmental assessment report needs to be done with the inclusion of the Department of Business and Tourism Nova Scotia.

6.3.2 - Engagement Sessions

The public consultations that I attended did not have any information in regards to an outfall in the Caribou wharf region. All discussions and diagrams we were presented had the outfall in the Pictou harbour region.

The Caribou wharf area is the 3rd highest entry point for Nova Scotia. It is an entry point for 475,000+ visitors to Nova Scotia annually on the ferry service between Caribou / Wood Island. I would have presented a much different scenarios of questions to the public sessions if this location would have been identified. Although it is the same approximate distance from our public beach, the potential impact on tourism to Nova Scotia would be 10 fold if there were discoloration, odour, or any other visible issues at this new outfall point. What is perceived as a nuisance could have real socio-economic impact. An environmental assessment report and new public consultations need to happen before construction can begin on the new treatment plant.

6.4.1 - Engagement Activities

There were no invitations sent to any tourism representatives during this session. Tourism operators were never identified as stakeholders in this EA process. An industry that produces revenues of 2.8 billion dollars provincially and 224 million locally was not seen as a "stakeholder". This complete absence of an industry that would be affected by the new project who were not properly engaged in the EA process is reason enough for the Minister to order an environmental assessment report.

In conclusion, the hefty treatment replacement facility project document submitted by Northern Pulp did not address a key part of Nova Scotia's Environmental Act, "the socio-economic well-being of society". It did not address a key stakeholder in the process. I would ask the Minister to order an environmental assessment report for these reasons.

Pictou Lodge Beach Resort

www.pictoulodge.com

www.youtube.com/pictouvacation

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's new ETF
Date: March 4, 2019 4:02:20 PM

Minister of Environment
Province of NS

March 4/19

I am writing you about Northern Pulp in Abercrombie , NS and their plans to put a pipe in the Northumberland Strait.

My dad is a fisherman out of Caribou Harbour. He fishes lobster, rock crab, herring and scallops. I go fishing with him sometimes and look forward to doing that when I am older.

Someday I might want to do that for a living .

Boat Harbour is one of Nova Scotia's worst environmental sites. Now, Northern Pulp wants to pump that waste into the Strait via Caribou Harbour; right where my Dad fishes.

I am scared this will kill all the fish. What will he do then?

Also, I heard on the radio today that what will come out of this new pipe into the Strait will actually be worse than what currently flows out of Boat Harbour into the Strait.

Here is the link to the CBC radio show :

<https://www.cbc.ca/listen/shows/information-morning-ns/segment/15672343?fbclid=IwAR0jKWPZfrIYOx1s-N8pQsddtWS6jY8FdaE13dS5oZqwHocqdg9GPkhYClg>

I am worried this will poison the fish and lobster and crab. Will everyone still be able to eat it?

On pg 84 of the EA, the projected Total Suspended Solids is 48mg/L. If 85 Million Litres of Effluent is processed per day, that equates to around 4 Tonnes of TSS per day into the Strait!

The EA states that with the proposed AST facility, that TSS will be higher than the old waste process.

How can 4 tonnes of Total Suspended Solids NOT harm the Northumberland Strait every day

I hope you reject this environmental assessment application and do what is right for the Province of NS

thank you

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 4, 2019 4:06:44 PM

Project: replacement_effluent_treatment_facility_project Comments: Lets Do The Math: Everyone wants better health care, better access to mental health care, all 100 series highways twinned as well as an overall better maintained road system, a better education system, help for the homeless, an end to poverty, and the list goes on and on. So how do we fix these problems? Well it comes down to government expenditures doesn't it? We are a poor province and are in debt up to our ears, so the province cannot afford to do any better than they are doing now. Without sustainable economic growth and a growing taxpayer base, how can we expect the government to address these issues adequately? So the solution is simple, Nova Scotia needs more taxpayers. We have heard for decades that "business is the backbone of a good economy". Well this is where the rubber meets the road. The citizens and government must support new industries and foster the growth of present industries. This is not rocket science. The world views Nova Scotia as a non-business friendly province, especially in the resources industries. I started my own business from scratch almost forty years ago in the forestry industry. It is a small business, but we employ between 15 and 18 full time, seasonal employees, some of whom have been with us for over thirty years. For most, we are their only source of employment. I can say without hesitation that Paper Excellence, the owner of Northern Pulp, is unquestionably the best company we have done work for in all of those years. They far exceed the amount of money they are required, by legislation, to put back into privately owned woodlots on an annual basis. Their budget for follow up treatments, such as planting and thinning, are consistent and reliable every year. This allows a small business such as mine to retain an experienced labour force. They are a globally known company, particularly for being efficiently run and environmentally friendly. Northern Pulp leaving our province would have two monumental negative effects: 1 the forest industry would be near collapse-- this far exceeds the immediate 300 jobs related to the mill itself. Its closure will result in thousands of lost jobs as there are numerous companies who rely upon them for a significant portion of their revenue. To think that there is a plan B that will overcome this loss is simply absurd 2 With our already tarnished image around the world as being anti-industry, and wilfully booting out such a globally well regarded company as Paper Excellence, this will serve as just another nail in the coffin for our province. If we're willing to sacrifice a company which is vehemently working to re-establish its image and develop a forward-thinking environmental plan, what possible expectations can we have for future industries to consider our province as "open to business"? To quote General Colin Powell, former U.S. Secretary of State Great leaders are almost always great simplifiers, who can cut through argument, debate and doubt to offer a solution everybody can understand. Come on government and opposition, where is the leadership? Name: Email:

@eastlink.ca Address:

: Privacy-

Statement: agree x: 64 y: 24

From: @mail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 4, 2019 4:33:07 PM

Project: replacement_effluent_treatment_facility_project Comments: 4 Mar 2019 Nova Scotia Department of Environment, I am writing in regards to Northern Pulp's new effluent treatment facility and 15.5 km pipe proposed to discharge up to 85 million litres of treated effluent and four tonnes of suspended solids daily into the Northumberland Strait. I am a resident of Central Caribou, where this pipe is proposed to run through, I have walked the coast of Caribou Harbour almost daily with my children for 12 years. I have several concerns about effluent and suspended solids where my children, dog and I swim. What will happen to the clam and oyster beds that live in the mud of Caribou Harbour, Northern Pulp's open house information is not matching what is in the EA, the treated effluent leaving the aeration basins of Boat Harbour is meeting Pulp and Paper Effluent Regulations and causing harm but nothing can be done to remediate this other than some recommendations. Caribou Harbour is not a large body of water, the tide will bring effluent and suspended solids into the harbour. The EA and receiving water study state that the effluent will not come into Caribou Harbour, I fail to see how this is possible as the end of the pipe is right outside the mouth. Figure 8.12-1 page 363 of the EA is a still photo of the bottom of Caribou Harbour and states that it is devoid of microflora and microfauna. I can tell you that it is most certainly not void of life perhaps, because one still shot of a sand bar cannot show the huge oyster and clam beds present in Caribou Harbour, we have to wear swim shoes in the water there are so many you cannot walk without them. Oysters and clams are filter feeders and will be the first affected by this pipe. The mitigation measures for socio-economic issues is to take our concerns to the NSE Dept in Granton and Northern Pulp Community Liaison Committee will continue to facilitate two-way communication and advise to Northern Pulp. It is well known that the Community Liaison Committee meets in secret and the membership is hidden from the public. It also states that a communications and compensation plan will be available for the commercial fishermen, this is the first mention that there will be any effect of the effluent 2-5 meters past the outfall. If there needs to be a compensation package due to regular operation of the ETF how can the significance of the residual effects be: not significant or adverse as stated in Table 8.14-2 pages 444-445. I attended all of Northern Pulp's open houses, these were held for the Pictou Harbour outfall, they did not have any information sessions on the Caribou outfall. The information I received stated that there would be one tonne of suspended solids being pumped out daily, after reading the EA and calculating 48 mg/L by 85 million litres that would mean there are 4 tonnes of suspended solids daily going through the pipe. The ferry channel already needs to be dredged due to sand build up in the channel, how often would it need to be dredged if four tonnes of solids would be pumped into it daily, also I have not seen anywhere in the EA how routine dredging would affect the pipe. At the information open houses they had pictures of treated effluent from 1970, 1990, 2017 and finally a predicted photo of 2020. The last picture showed that the effluent was clear and this is how it would look in the new system History Effluent Quality picture Open House Panel 14, link below. This is not how it will look coming out of the pipe. There are pictures and video of what the effluent looks like leaving Boat Harbour now it is dark brown, however that is better than what it will look like coming out of the pipe because the new system does not replace the Boat Harbour Lagoon. It is only replacing the settling basins and aeration basins, what the water will look like leaving the pipe is what the water looks like now leaving the aeration basins. This is meeting regulations, and will continue to meet regulations in the new system. That does not mean it will not cause harm to fish, shellfish, marine plants, marine animals, birds as

well as their habitat. When Environment and Climate Change Canada Pulp and Paper Effluent Regulations PPER came to meet with the PEI Legislative assembly Feb 1st, 2019 see link below for transcripts they stated that Northern Pulp is one of the 70 of pulp mills that are causing harm even though they are meeting regulations. The Environmental Effects Monitoring EEM shows they are harming fish habitat while meeting regulations. The only corrective action taken after harmful effects are found by the effluent is Pulp and Paper regulators make recommendations for them to implement for the next three years, whether or not these changes are made or work isn't checked until the next three year period of the EEM, and if they are still harming fish habitat there would just be more recommendations to them. So just like when Pictou Landing First Nation told Environment Canada that the mill was killing all the fish 50 years ago, there is still nothing living in Boat Harbour and the mill is meeting regulations. Would the same not happen to the Northumberland Strait? Everyone could complain that there is nothing living around Caribou but the mill is meeting regulations so the only thing that can be done is recommend changes every three years. The Strait is a unique ecosystem that must be protected. We are known for our swimmable beautiful beaches, our pristine waters that produce a sustainable seafood industry renowned around the world. If this is approved there will be no turning back, the Pulp and Paper regulations do not protect us or the Strait, if this decision is based on whether or not the EA can pass PPER then the Strait will become the next Boat Harbour, because it is the same regulations that they are passing now. Northern Pulp has made no effort to meet with the communities of Pictou and Central Caribou before and after the pipe location changed and the information that was provided by the meetings in New Glasgow are not even close to the information that is now in the EA. For these reasons I ask you Minister to reject this proposal. Thank you
Central Caribou, Nova Scotia http://www.assembly.pe.ca/sittings/2018fall/transcripts/17_2019-01-02-transcript.pdf <http://www.paperexcellence.com/copy-of-faq> click on tab for project launch open house materials if link below does not work
<https://drive.google.com/file/d/14OWv3oA8C1E1ys4hxFCBCq4IcRkpkJq5/view> Name:

Email:

@mail.com Address:

Privacy-Statement: agree x: 66 y: 23

From:
To: [Environment Assessment Web Account](#)
Subject: Response to Northern Pulp pipeline proposal
Date: March 4, 2019 5:49:58 PM

Dear Margaret Miller , NS Environment Minister,

I am writing to express two concerns I have with regard to Northern Pulp's Replacement Effluent Treatment Facility Project.

I am a retired teacher, father of two, and have been a resident of Braeshore, Pictou County for 39 years. I have lived in a shorefront home for the past 14 years and water related activities are a very important part of my life.

My first concern relates to the yellow signs that appeared all along our shore a number of years ago warning us not to eat the shellfish.



When these signs went up it made me worry about the quality of our water. Why can't we safely consume shellfish?

I learned that according to Fisheries and Oceans Canada, Pictou Harbour is in a prohibited area because of contamination from waste from the following:

- failing residential wastewater systems
- municipal wastewater treatment system
- runoff from land, like in the case of agricultural activities
- industrial facilities discharging into the environment

Some steps have been taken to help this situation. The town of Pictou has installed a sewage treatment facility. County residents have their own septic systems that must meet strict guidelines relating to proximity to water. I doubt that agricultural run off is now not as significant as there are now many more homes and cottages along the shore than there are farms.

That leaves Northern Pulp. Its new pipe will dump 60 to 90 million litres of effluent per day into Caribou Harbour, which also is in a prohibited shellfish area. It seems that while municipalities and property owners are working to improve water quality, Northern Pulp is only making our water worse. Will we ever have a time in the future when the yellow signs won't be needed?

My second concern relates to recreational sea bass fishing. This is an activity I enjoy very much from my shoreline and I fear that with continued effluent entering our water that this activity may go the way of shellfish harvesting.

I suggest that more research needs to be done to ensure the safety of our waters.

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: Comments to Environmental Assessment"Northern Pulp Wastewater Treatment Project"
Date: March 4, 2019 9:20:05 PM
Attachments: [EA submission.docx](#)

To: Hon. Margaret Miller, Minister of Environment for Nova Scotia

Thankyou for the opportunity to provide comment regarding the EA presented by Northern Pulp with respect to the Northern Pulp Wastewater Treatment Project. Can you please see the enclosed letter dated March 04,2019 reference to Northern Pulp Wastewater Treatment Project from myself and register it with the EA documents as public comment.

With Appreciation.....

To: Honorable Margaret Miller, Minister of Environment for Nova Scotia

Date: March 04, 2019

From:

RE: Comments to Environmental Assessment "Northern Pulp Wastewater Treatment Project"

I have read large portions of the "Northern Pulp Wastewater Treatment Project EA and would appreciate your consideration of four points which I have identified. I live in the small community of Toney River and although retired now, worked with Michelin Tires Canada for most of my working career. I had worked with Scott Maritimes Paper and am also a woodlot owner.

1. I live in an area which is a strong fishing community. We continually hear local concerns regarding this project and comments are most often presented with no facts. Example...."the effluent will be poison to everything", "in today's world, we do not need to put effluent in the ocean water", etc. It is essential that The Ministry deal clearly with facts and science. The EA has presented extensive facts and it is correct and good to question for detail and understanding. There should be questions and a need for further description however always with a focus on the facts. Our efforts to achieve environmental improvements must be based on clear true facts of science and history.
2. The EA has proposed detailed design and construction of an effluent treatment system described as Moving Bed Biofilm Reactor (MBBR) BAS and has identified comparison Kraft mills in Germany and Sweden where the technology is used....section 4.2.1. To provide factual performance results of this technology, data collection from these mills should be provided identifying effluent volumes, chemical quality, color and temperature. Note section 5.2.2.9 which describes the anticipated effluent quality of the NP project. The results of technical "best practices" should be well identified in order to provide confidence in the engineered project.
3. I have not been able to identify clearly in the EA, a multiyear past history of the effluent quality from the Boat harbor facility to the Northumberland Straight with respect to quantity, chemical qualities, color and temperature. Note again section 5.2.2.9 the anticipated effluent quality for the new NP project. I would suggest that we should be making a clear comparison between the "before" and the "after" for this project with respect to each of the effluent parameters. This study of the past effluent entry to the Straight should also be compared with the health and catch rate of lobsters in an area of several kilometers from the Boat Harbour outfall. Twenty to thirty years of data regarding this would be benefit in understanding our current situation and

predictability of the future. Lobsters should be somewhat representative of the ocean health as they are bottom feeders of other ocean life and not plant life. As the resource is so important, extensive data should be available.

4. One area of this development is the installation of 4.1 KM of buried undersea piping and diffuser assembly. Section 8.12.3.3 of the EA deals with construction of this piping and the disturbances with a resulting influence on sea life. Can I suggest that a comparison could be made to the Confederation Bridge project from New Brunswick to PEI. Although the NP project is much smaller and in a more confined water area, historic information of physical changes and lobster catch rates in areas around the Confederation Bridge could improve the understanding of any negative consequences from this part of the NP project. I would suggest that the effluent pipeline route option Section 4.2.4....to the Pictou Landing / Boat Harbour area and underwater a distance into the Northumberland Strait should have had greater consideration and priority. The Caribou Harbour area is a very busy location with the largest fishing boat concentration on the Northumberland Strait, the PEI to Nova Scotia ferry location and a very busy tourist accommodation area.

5. Closing.....

I would ask you to consider my noted points and call for some further study and documentation to best clarify the construction, results and influences of the project. This can lead to better managing any potential risks of the Northern Pulp Wastewater Treatment Project. Our Province has a very high rural population and that follows to be a region where reliance on natural resources is very high and important. The forest industry and Northern Pulp are very important to the economy of the entire Province, and every effort must be made to safeguard this contribution to the economy. A detailed understanding of all the science and facts associated with this project is of utmost importance to well inform the public and ensure that wise decisions are made.

Changes in our Provincial forest policy as regards to the use of low grade wood fiber deserve long term planning and must not be any part of this project consideration.

Can I please suggest that further information to the EA be developed per the above items 1,2,3, and 4

Thanking you.....

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 4, 2019 9:46:02 PM

Project: replacement_effluent_treatment_facility_project Comments: I am writing to express my concerns around the proposed Effluent Treatment Facility that Northern Pulp is planning and the placing of out flow pipes into the Northumberland Strait. Having had cottages on the Strait for most of my life and frequenting the local beaches with my children and grandchildren, I am greatly concerned with the damage the treated effluent will cause to the waters we swim in , beaches we play on and fish we consume. I believe that a Federal Assessment would be more stringent and have little doubt the results would show a truer picture of any risk to our environment. I only want to ensure that the ecosystems in the Northumberland Strait and those that live by it and work on it are protected. We do not need to rush into a situation that could ruin the fragile ecosystem that borders on three provinces, itâ? Ts breeding grounds and the local fishing and tourism industries. Northern Pulp will be dumping approximately 85 million litres of effluent da ily and they have noted on Page 2 of their EA that the contents of the effluent will not be known until the system is operational so they have not released the chemical make up in their EA. As a citizen of the affected area, I request the Provincial Government do their due diligence, ensuring we know exactly what is going to be pumped into our waters and the effects it will cause on the ecosystem. The Mill has been poisoning our air and water for the last 50 years, we must be sure this is not the case in the future, therefore we need a Federal Assessment to ensure our environment and our children will no longer be negatively affected by the mill. Thank you for your time. Sincerely,

Resident of Pictou, NS Name: _____ Email: _____
@gmail.com Address: _____

Privacy-Statement: agree x: 56 y: 23

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Replacement Effluent Treatment Facility Project
Date: March 4, 2019 11:45:06 PM

Dear Minister of the Environment for NS, Margaret Miller,

I am writing to request that an Environmental-Assessment Report be undertaken with regard to the above-named project.

I have lived my entire life, with the exception of my time at Dalhousie University in Halifax, along the shores of the Northumberland Strait in Pictou County. I can look out across the Strait and see the shores of Prince Edward Island and I am very aware that it is not only the people of Nova Scotia who will be affected by this project.

I have attempted to read through the voluminous quantity of documents presented by Northern Pulp to your department, and I find that a number of things concern me

1. In Table E.1.1-1, Summary of the Significance of Project-Related Residual Environmental Effects, page xxxiv, it is **predicted** that the project, during all phases, will have no significant effect on any component of the environment. However, nowhere is it stated exactly what will be the composition of this effluent that they propose to continually pump into the Strait, day in and day out until something goes terribly wrong. And that may not take long, given that there has been no study done to determine the potential impact of this effluent of unknown composition on lobster larvae. This deluge of materials and chemicals **cannot and will not** simply "disappear" with no adverse effects. Indeed, it is entirely possible, perhaps even probable, that this action will cause significant adverse effects to environmental health, to human health and to the economic health specifically of the fishing and tourism industries, and also to other individuals and businesses whose livelihoods depend on the well-being of these major industries.
2. There has been **no public consultation** on the proposed route of their 15.5 km pipeline along Highway 106, entering the marine environment near the Ferry Terminal at Caribou and proceeding out into Caribou Harbour where the effluent (of unknown composition) will be discharged into the **prime fishing grounds** of the Northumberland Strait. This is madness! It would truly be reckless to take such a risk adjacent to any fishing harbour, let alone the largest fishing harbour on the Nova Scotia side of the Strait, without consultation and further study.
3. The concluding paragraph of Section 14, page 588 states "Overall, based on the results of this EA Registration, it is concluded that, with planned mitigation and the implementation of best practices to avoid or minimize adverse environmental effects, the residual environmental effects of the project, including the effects of accidents, malfunctions and unplanned events as well as cumulative environmental effects, during all phases are rated not significant." Is this a logical conclusion considering that it is stated no field work was conducted with regards to Harbour Physical Environment, Water Quality and Sediment Quality (Section 8.11) nor with regards to Marine Fish and Fish Habitat (Section 8.12)? My second question is: Not significant to whom? Perhaps not to the owners of Northern Pulp. They don't need to care about the

marine environment in Atlantic Canada. They don't need to care about the well-being of those who live along the Northumberland Strait. They don't need to care about the livelihoods of those who work in the fisheries or in tourism. They don't even need to care about the forestry workers in this area. They can simply continue to live their lives far from here, no matter what happens with their predictions and assumptions.

For these reasons, I believe it is important that this project be the subject of the more in-depth analysis and investigation of an Environmental-Assessment Report.

May God give you wisdom in this matter.

Sincerely,

Sent from [Mail](#) for Windows 10

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 9:37:06 AM

Project: replacement_effluent_treatment_facility_project Comments: I support this Project.
Name: Email: @ns.sympatico.ca Address:

Privacy-Statement: agree x: 81 y: 19

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 10:00:44 AM

Project: replacement_effluent_treatment_facility_project Comments: Having no regard for our environment, and never have, NP has proposed a replacement Pipe plan to release untreated effluent directly into the Strait. This is a terrible plan. How is it okay to dump it anywhere for that matter? Who, in their right mind, could possibly think otherwise? The continued damage our Nova Scotian Government permits to happen to our environment in the name of jobs is outrageous! My mind is boggled at the sheer stupidity of it all. Putting Our Oceans Habitat, its ecosystems, at risk is putting Humanity at risk, in my view, and a crime. Of course were not the only polluter in Canada, or the world, but doing something because everyone else does it doesnt make it right or solve the problem Our World faces. Lets be better than that Nova Scotia. Name: Email: gmail.com Address:

Privacy-Statement: agree x: 74 y: 31

From:
To: [Environment Assessment Web Account](#)
Subject: NP and the environment
Date: March 5, 2019 10:18:33 AM

I spent my summers on the pristine Northumberland Strait. My grandfather had built our cottage in 1929. My mother grew up there. I and my five siblings grew up there, as did my children and my 10 nieces and nephews. I was seven when "the smell of money" would blow over and ruin our days. Our water turned brown and reeked. Dead fish would turn up on the beach. President of Scott Paper, was our neighbour at Chance Harbour and he would occasionally take samples of the water and have it tested: nope! That's not Scott ! Well now we know it was. Jobs were too important at the time. And indeed at least for the terrible insidious poison they were shipping our way at least they employed about a thousand locals. You kind of felt like at least Scott cared a bit about us and our environment...

NP doesn't care.

NP employs a couple of hundred (I know there is spin off in the woodlands and Halifax but that is not enough to justify poisoning the locals of Pictou County, our air and water, our fisheries and tourism).

NP sends all their profits to Indonesia.

NP is not willing to invest in Pictou County and when they finally have to invest - they will choose to close and leave NS and its taxpayers with a huge cleanup bill.

Save our fisheries.

Save our water.

Save our air.

Save our people.

Save ourselves some pain and insist now on a proper EA

Sent from my iPhone

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 10:34:48 AM

Project: replacement_effluent_treatment_facility_project Comments: I believe that this should be allowed to proceed, please approve this EA. Name: Email:
@gmail.com Address:

Privacy-Statement: agree

x: 88 y: 13

From: @GMAIL.COM
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 10:35:12 AM

Project: replacement_effluent_treatment_facility_project Comments: I BELIEVE THAT THE PROVINCIAL GOVERNMENT IS CAPABLE OF OVERSEEING THAT THE ENVIRONMENT IS PROTECTED WHILE ALLOWING FOR INDUSTRY TO CONTINUE. PLEASE APPROVE THIS EA Name: Email:
@GMAIL.COM Address:

Statement: agree x: 91 y: 9

Privacy-

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp E.A
Date: March 5, 2019 10:39:21 AM

Why should Northern Pulp be allowed to send their effluent treated or not treated directly into the Northumberland Strait?

1. Pipeing effluent into a most lucrative fishing grounds on the North Shore of Nova Scotia, too much risk.
2. Proposed pipe outlet being in marine navigation waters, jurisdiction Federal Government.
3. Climate change and pollution. We cannot afford anymore risk. Improve risk assessment Government Red Tape is required when Canadians health and wellbeing are at risk. Improve risk-based compliance.
4. The government needs to strengthen regulations to ensure transparency, predictability and accountability.
5. This decision is not about jobs vs. jobs it's about industry vs. an entire eco system. Too much risk.
6. We cannot afford to be making future investments in an industry that is decimating our forests. Too much risk.

WEARWELL GARMENTS LIMITED



126 Acadia Avenue, Stellarton, NS, B0K 1S0
Toll Free: 800-565-1188
Main: 902-752-4190
Fax: 902-752-4328

SOLUTIONS THAT LAST!

From: @northernpulp.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 10:46:33 AM

Project: replacement_effluent_treatment_facility_project Comments: Dear Ms. Miller, I have worked at Northern Pulp for six years as of yesterday. This month also marks my 25th year in the Pulp Paper industry. I understand very well the importance of this industry to our provincial economy. In my six years at Northern Pulp, I have seen many positive changes in terms of emissions and our environmental footprint. The Mills owners have spent large amounts of money to improve the operation and a reduction in emissions is clearly evident. Northern Pulp has treated me well the past six years. I get to work relatively close to home and I get to work in a professional environment with other well educated individuals. Northern Pulp has allowed me to continuously improve myself through training opportunities. This allows me to improve and maintain the professional designation that I hold. The other Pulp Paper mill that I worked at constructed a new effluent treatment center in the mid-1990s. That was seen as an expansion to the mill and an improvement for all concerned. It amazes me daily that the ETC proposed for Northern Pulp isnt seen the same way. There is no reason why the forest and fishing industries cant co-exist. They have in this community for over 50 years. Now with 2019 technology for effluent treatment, it will be better than ever. People should listen to the science and not the uninformed opinions of a few. The science will prove that this is a worthwhile project for not only today but also in the future. I look forward to the remediation of Boat Harbour. Hopefully decisions made in 2019 are far better thought out compared to decisions made in the late-1960s. I also look forward to continuing my career at Northern Pulp. I look forward to providing my daughter with a good standard of living and opportunities for her today and in her future. I hope to do this in a province that respects the environment and values industry in a variety of forms. Im confident that all can co-exist. Respectfully yours, Name:

Email: @northernpulp.com Address:

Privacy-Statement: agree x: 51 y: 22

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Proposal Environmental Impact
Date: March 5, 2019 10:50:13 AM

Re: Northern Pulp Proposal,

Dear Sir/Madam,

We live directly across the Strait in Little Sands, PEI from where the proposed pipe is planned and view the smoke stacks of Northern Pulp. We already have them polluting our air and now they want to further pollute the ocean waters.

The health impacts experienced from those living across from Northern Pulp are most concerning. People of all ages are experiencing rates of cancers and disease that appear to be far higher than averages. Why? The only source of known pollution in this area is Northern Pulp. Pollutants from the stacks are put high into the air and come down in areas miles from the pollution source. Now there is a plan to direct waste discharge 4k into the Strait towards PEI.

We are calling for a full health impact study to be performed to find out why so many cancers and diseases are being experienced by people living in our area.

This plant has a documented history of polluting which brought about the questionable plan to dump their waste into the Strait. Should we trust them or their studies? Using the threat of closing and job losses to in order to justify their actions which are having such a profound negative impact upon so many people. Surely there exists a better way.

If the effluent does not contain pollutants or carcinogens then:

Why are is it not being discharged at the shore by Pictou?

Why is it being piped 4 Km from shore?

This strait is not isolated and will cause environmental damage far beyond our region as it connects to the oceans of the world.

Please have the vision to see the serious consequences of allowing this to go forward and do the right thing by rejecting their application.

Sincerely,

Little Sands, PEI

From: @dal.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 11:44:32 AM

Project: replacement_effluent_treatment_facility_project Comments: I would like to see a more thorough investigation of the environmental impact of this project than what the NS government currently plans to do. Northern Pulp has a history of erratic adherence to regulations and regulation guidelines and delay in notification of the public of problems. Equipment can fail, pipelines can break. What happens if equipment failure results in contaminated effluent - who is monitoring, how long will it take to find out there is a problem, and will the consequence be immediate shutdown of the mill until there is a remedy? What is the cumulative effect of long-term deposit of heated effluent into the Strait? I also commend the Premier of this province for holding firm on no extension. If this issue was truly a threat to their business, I believe that Northern Pulp would have made it a priority and funded the necessary resources to get a plan together within the legislated time frame. That they havent and are asking for an extension suggests to me that they thought they could use the politics of job loss to get an extension. I also believe that they do get an extension, they will be back in a years time with other excuses for why they need an additional extension. Name:

Email: @dal.ca Address:

: Privacy-Statement:

agree x: 53 y: 18

From:
To: [Environment Assessment Web Account](#)
Subject: No pipe please
Date: March 5, 2019 11:46:31 AM

Under no circumstances can I agree to an extension of the use of the Boat Harbour facility or a pipe directed into the Northumberland Strait. Polluters need to be responsible for the damage they cause not the tax payers. Let's get this right in 2020. Enough harm has already been done.

Owner/Principal - xOff Properties

Sent from my iPad

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 1:30:54 PM

Project: replacement_effluent_treatment_facility_project Comments: To: Minister of the Environment, I will firstly start with an article, below, from the Chronicle Herald which summarizes nicely my feelings on this whole affair. I do believe that the time for the Mill to close has come, I have lived in Pictou County all my life and enough is enough. This Mill in its many forms has been subsidized too much for over 50 years and the pollution, to the water and the air, has caused far too much damage to even estimate to human health, recreation on the waterbrown sludge for years stretching for many miles down the shore, to tourism in general and, in particular, to the town of Pictou, the constant foul smell in the air, damage to the Fisheries, etc. Cut our mill lossesChronicle Herald, Voice of the People, Feb.23, 2019 Thank you to Jim Vibert for his Feb. 20 column on Plan B for the Northern Pulp mill. I really think itâ?Ts time to return Pictou to a pristine tourist destination, and allow the fishers to keep earning a living without more problems threatening their fishing grounds. This is also our food supply. Certainly, if the mill is to remain open, an in-depth and unbiased assessment of the effluent is essential, and promises to the Pictou Landing First Nations community must be honoured. A solution is for the mill workers to be compensated with three yearsâ?T salary or expected wages, and be provided with career counselling. The foresters should be provided with an appropriate lump sum to help them return to responsible forestry management and environmental considerations. This would be a mere drop in the bucket compared to what the province has spent on the mill so far, and what itâ?Ts likely to cost us in the future.

Antigonish I am of the learned opinion that a Class 1 does not cut it, the Registration Document for this is certainly lengthy but it is insufficient to learn the truth and prove once and for all that the Mill will not cause further environmental problems. Your job is to protect the whole environment and a Class 2 assessment needs to be done period!! Please keep the politics out of your decision and do your job, not what is best for politics. Name:
Email: @gmail.com Address:

Privacy-Statement: agree x: 55 y: 16

From:
To: [Environment Assessment Web Account](#)
Subject: Replacement Effluent Treatment Facility Project
Date: March 5, 2019 2:42:36 PM
Attachments: [Response to Northern Pulp.docx](#)

Please see my response to the proposed assessment as requested by you.
Thanks for consideration of my response, as attached.

--

Response to Northern Pulp's Application for an Environmental Assessment

March 5, 2019

To: Minister of the Environment,

I will firstly start with an article, below, from the Chronicle Herald which summarizes nicely my feelings on this whole affair. I do believe that the time for the Mill to close has come, I have lived in Pictou County all my life and enough is enough. This Mill in its many forms has been subsidized too much for over 50 years and the pollution, to the water and the air, has caused far too much damage to even estimate to human health, recreation on the water (brown sludge for years stretching for many miles down the shore), to tourism in general and, in particular, to the town of Pictou, the constant foul smell in the air, damage to the Fisheries, etc.

"Cut our mill losses (Chronicle Herald, Voice of the People, Feb.23, 2019)

Thank you to Jim Vibert for his Feb. 20 column on Plan B for the Northern Pulp mill. I really think it's time to return Pictou to a pristine tourist destination, and allow the fishers to keep earning a living without more problems threatening their fishing grounds. This is also our food supply.

Certainly, if the mill is to remain open, an in-depth and unbiased assessment of the effluent is essential, and promises to the Pictou Landing First Nations community must be honored. A solution is for the mill workers to be compensated with three years' salary or expected wages, and be provided with career counseling. The foresters should be provided with an appropriate lump sum to help them return to responsible forestry management and environmental considerations.

This would be a mere drop in the bucket compared to what the province has spent on the mill so far, and what it's likely to cost us in the future.

Jean Harrison, Antigonish"

I am of the learned opinion that a Class 1 does not cut it, the Registration Document for this is certainly lengthy but it is insufficient to learn the truth and prove once and for all that the Mill will not cause further environmental problems. Your job is to protect the whole environment and a Class 2 assessment needs to be done period!! Please keep the politics out of your decision and do your job, not what is best for politics.

From: @live.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 2:54:02 PM

Project: replacement_effluent_treatment_facility_project Comments: I strongly feel that Northern Pulp are doing their due diligence in providing a new world class treatment facility. Their science is tested and proven. If their design meets standards and specs, they should be allowed to proceed and more time be given to build the right solution. Fish stocks in the Northumberland Strait have been excellent over the past 50 years. With the new system, the effluent will be treated much better than in the past and hence a huge improvement from what we have today! Name: Email: @live.com Address:

Privacy-Statement: agree x: 41 y: 17

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 3:42:28 PM

Project: replacement_effluent_treatment_facility_project Comments: EA Submission2nd
March 4,2019 Additional Info from Stantec Chart 5.6-1 and more observations. Page 8

Further to my comments submitted by email on February 13, 2019, solids dispersed into Northumberland Strait were described as minimum 1000 Kg on page 4, last paragraph. Actual maximum values of 4 Tonnes of Solids per day have been calculated based on Stantec's Table 5.6-1 regarding discharged solids. TSS of 48 mg/liter equates to a probable maximum of 4 Tonnes. This large amount of solid material was never put into the ocean by the old Boat Harbour System indicating the new AST will be much worse for the environment. This amount is absolutely unacceptable, yet the antiquated Canada PPER regulation for TSS is 11,500 kilograms/day fact supplied by Bruce Chapman of NP. This TSS Regulation MUST be updated and can never be one size fits all. It must be tailored to the receiving water to permit any safety to our marine life. The Northumberland Strait is described unscientifically, yet accurately by PEI MLA Colin La Vie as being like an old washing machine sloshing that highly tainted fresh water effluent back and forth with the tides, over the Lobster and Herring Beds and not sufficiently flowing out to ocean. A more scientific approach is this warning: Hypoxic or anoxic conditions can develop when oxygen is consumed by decomposing organic matter. If currents are weak and the organic matter is not being flushed from the area, these conditions may generate potentially toxic reduced compounds such as methane, ammonia and hydrogen sulphide Pearson and Rosenberg, 1978 Human Health Evaluation: There is none in a Class One Assessment. The Minister could order one but this would prolong the timing of the process which NS Environment does not appear to want. County residents have long decried the lack of health monitoring yet statistics seem to bear out there are increased serious health issues occurring. I can only hope that enough public comments on Health might be generated in this Environmental Assessment Forum to allow for the possibility of including human health considerations. My final comment is on the most disappointing action not taken by Northern Pulp. A Lobster Study! To gather info to understand and help protect the Lobster Fishery from that effluent, which will carry an enormous organic load. A Lobster Study was promised to be undertaken. PEI Legislature Committee 16 Feb 2018. Their testimony revealed Lobster Studies were on their immediate radar and would be carried out. NP's agent, Dillon was looking after securing Scientists for expert advice. Those studies were never carried out or perhaps no experts could be secured who felt there was no danger? Trust broken! Again,
Thank You. Name: Email: @hotmail.com Address:

Privacy-Statement: agree x: 56 y: 18

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 4:36:36 PM

Project: replacement_effluent_treatment_facility_project Comments: I am fully in support of replacing Boat Harbour with the newly proposed Effluent Treatment System. We need this to keep forestry in Nova Scotia as it would be a vital asset. Northern Pulp should be given the opportunity to be given an extension. Name: Email: @gmail.com
Address:

: Privacy-Statement: agree x: 17 y: 14

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 4:37:06 PM

Project: replacement_effluent_treatment_facility_project Comments: I am fully in support of replacing Boat Harbour with the newly proposed Effluent Treatment System. We need this to keep forestry in Nova Scotia as it would be a vital asset. Northern Pulp should be given the opportunity to be given an extension. Name: Email:
@gmail.com Address:

: Privacy-

Statement: agree x: 50 y: 20

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 4:39:04 PM

Project: replacement_effluent_treatment_facility_project Comments: I am fully in support of replacing Boat Harbour with the newly proposed Effluent Treatment System. We need this to keep forestry in Nova Scotia as it would be a vital asset. Northern Pulp should be given the opportunity to be given an extension. Name: Email: @hotmail.com
Address: Municipality:

Privacy-Statement: agree x: 74 y: 20

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 4:54:38 PM

Project: replacement_effluent_treatment_facility_project Comments: I support the NP replacement effluent treatment facility project and I support an extension to the timeline to allow a thorough and successful completion of the project. Name: Email:
@hotmail.com Address:

: Privacy-Statement: agree

x: 56 y: 16

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 8:07:05 PM

Project: replacement_effluent_treatment_facility_project Comments: I want to start this comment by stating that I wish to remain anonymous and my views do not represent that of my employers. My relation to this project is I am a homeowner that will be within the 500m distance from the pipeline and I am a professional engineer who works in the water and wastewater industry. I have had concerns since the initial consultation that is referenced within this report section 6.4.1. At this time, the consultants did not conduct themselves appropriately nor did they do their appropriate homework. Statements from their public sessions can be paraphrased as Pictou still dumps their sewage into the harbour and the treated effluent of a municipal wastewater plant is similar to that of industrial plants. The first statement was/is untrue and the second statement has several implications to me. Municipal wastewater is treating organic waste in some rare instances more than this. Industrial wastewater contains several other elements including inorganics such as heavy metals. If the belief that industrial wastewater is the same as municipal, why not set the limits the same. Those can be found in the Atlantic Canada Wastewater Guidelines Manual and are almost half 25 mg/L of the 48 mg/L BOD and TSS requirements listed in section 5.2.2.9. I will give the consultant credit however. They did mention the Caribou watershed and the Source Water Protection Plan, but they did not seem to engage stakeholders the way they should have. Nova Scotia Environment is part of the Source Water Protection Committed and helped develop several key components to the communication plan with the help of Hydrogeologist consultation. If the consultant truly wanted to gain full public input, reviewing the Source Water Protection Plan would have guided them to first talk to the Committee. This would have helped them identify additional water sources that are being currently developed northern section of the watershed, and it would have helped guide who to contact. Additionally, the Watershed identified within the report is actually considered Zone 2 of a three-zone watershed area that was defined by a hydrogeologist. Zone 3, not shown in the report, is a much large area that shows surface water zones that impact the watershed. This is relevant for both private and municipal water sources as groundwater sources that are impacted by surface water, typically defined as GUDI, can be impacted by activities in surface water. The idea is, if the surface water becomes contaminated, there is risk for nearby GUDI sources to become tainted as well. Furthermore, the delineation of 500 meters used in the consultant report is the minimum value that is recommended in the Source Water Protection Plan. The recommended distance is 650 meters. Finally, as both a private well/land owner and someone who works in the water/wastewater industry, I have concern with how quickly the consultants dismiss risks as non-significant or NS. If there is a chance that the pipeline could break and devastate water sources and the environment, thereby creating a non-reversible condition, with only partial promise that the effluent will not harm the environment it is not ANTICIPATED that the effluent plume will not be visible when it reaches the water surface, this is more than non-significant for those who could be impacted. The report states that effluent will meet PPER requirements, but this does not give me confidence when I drink water based on the Guidelines for Canadian Drinking Water Quality GCDWQ. I would like to conclude with, I do not fully agree that EAA 2012 should not apply as section 41a states to protect components of the environment... from significant adverse environmental effect caused by design project. Several significant adverse environmental effects have been observed in the past. Therefore, hedging risk management on operational inspection and maintenance does not instill confidence in me that things will be different this time. If this means the mill has to close, I would prefer to have a

short-term partially depressed economy than a permanent loss of water, environmental damage and property that has zero value. Name: anonymous Email: @gmail.com
Address:

: Privacy-Statement: agree x: 102 y: 21

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Class I Environmental Assessment - Replacement Effluent Treatment Facility Project
Date: March 5, 2019 8:37:53 PM

To Whom It May Concern,

I am writing this message to try and convey to you my concern regarding the proposed replacement effluent treatment plan Northern Pulp has presented. The mill has tainted the Northumberland Strait and Nova Scotia forests for over 50 years. The conversion of forest to disease and fire prone mono cultures (so called fiber farms) has been hard enough to swallow. Trees are resilient however and given enough time tend to reclaim the ground and return to a forest. The Strait and it's rivers, beaches, estuaries, etc. may not be able to recover as well if at all. Why risk so much for an industry that has hardly been a champion of the environment? They seem uninterested in exploring any other option than their pipe.

I don't want to see the end of the forestry industry. Surely there are other options for the province's woodlands than just pulp wood. The closure of a pulp and paper mill is nothing new. What have other areas that lost mills done with their trees? I can't imagine they were left to die in the woods. Wouldn't the government of Nova Scotia serve it's voters by encouraging a change in that industry through education, grants, etc?

The Northumberland Strait is a beautiful and important part of three provinces. The culture and economy of the land that it touches depends on it being healthy. Demand the federal government update the pulp and paper industry standards. Demand a federal environmental assessment. Demand Northern Pulp find an alternative solution.

Please stand up for the Strait, all it's provinces and the people that enjoy it.

Sincerely,

From: @yahoo.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 5, 2019 9:46:54 PM

Project: replacement_effluent_treatment_facility_project Comments: Dillon Consulting on behalf of Northern Pulp has stated that there is "No Significant Residual Environmental Effect Predicted." That proclamation is dishonest in more ways than one. There is no way to predict leaks, spills, equipment failure, malfunctions, or other accidents, natural or man-made. The waste proposal poses major risk to harming marine life, marine habitat, species at risk/endangered/threatened that include migratory and marine birds, fish, vegetation, reptiles etc. The proposal goes through the Pictou town and Caribou water supply. Two provincial parks and two nature preserves are within the effluent pipe footprint. If they are contaminated, then what was the point of preservation??? This cannot be allowed to happen. Meeting PPER doesn't prevent harm to marine life or marine habitat per Environment Canada. The characteristics of the proposed effluent is "unknown" to Northern Pulp. This is unacceptable. We want clean air and water and healthier forests. We want to protect our marine life. We want our children and grandchildren to be safe from this environmental time-bomb. We want our communities to thrive without having to worry about how lethal the effluent might be. Name: Email: @yahoo.ca Address:

Privacy-Statement: agree x: 57 y: 26

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 6, 2019 8:59:22 AM
Attachments: [_NPEA.docx](#)

Please find attached by response to Northern Pulp's Replacement Effluent Treatment Facility Project.

I would appreciate an email indicating you have received my comments.

thank you.

March 6, 2019

Dear Margaret Miller, Minister of Environment,

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project.

I have been a long time resident of Braeshore and taught high school biology in the town of Pictou for 32 years. I feel strongly that we need to protect our environment and be very cautious about any human activities that may threaten it.

I would like to comment on two concerns I have with the proposed effluent treatment project. My first concern is for marine mammals and turtles and secondly I would like to see results from studies on the effect of the effluent on lobsters included in the report.

Marine Mammals and Turtles

On page 398 of the report, Table 8.13-1 lists marine mammal species known to occur in the Northumberland Strait. I have personally seen a Fin Whale and Harbour Porpoises and see that they are listed in the table under the category of special concern. Later in the report on page 570, section 12.3.9.1 it states *"it is anticipated that potential residual environmental effects of the project on marine mammals, sea turtles and marine birds may occur during the construction and installation of the pipeline, and during pipeline operation and maintenance activities."*

This is very concerning.

Also, I have sighted what I am fairly certain was a **Kemp's Ridley sea turtle** on the beach near our house. Unfortunately, I do not have a photograph of the turtle but I did report it to the Canadian Sea Turtle Network in 2015. A few months after my sighting another Kemp's Ridley was found in Hall's Harbour Nova Scotia and reported on CBC News · Posted: Nov 11, 2015. After seeing news images of the turtle I am more confident in my identification of the type. According to the Nature Conservancy of Canada the Kemp's Ridley is categorized as critically endangered and is considered the most endangered species of sea turtle in the world. We must do everything possible to protect these vulnerable species.

Lobster Research

A second concern I have about the report is that I do not see any data on the possible damaging effects that the effluent might have on lobsters.

A personal experience I have with lobster research relates to a project done by one of my Advanced Biology 12 students. She was using Stage 4 lobster larvae in her project and unfortunately most of the larvae died when the temperature in the tank inadvertently increased over one weekend.

A quick literature search shows that there have been a number of research studies relating to various stages of lobster development and the factors affecting them.

The following is from the study titled Declining fecundity and factors affecting embryo quality in the American lobster (*Homarus americanus*) from the Bay of Fundy
[Canadian Journal of Fisheries and Aquatic Sciences](#) **72(3):1-12** · October 2014

*“By far the largest change we observed across years was the steady and significant decline in fecundity, with an 8%–10% decline from year to year and an overall decrease of 31% from 2008 to 2013 (Fig. 3). Fecundity is influenced by multiple factors (see above) but **temperature is likely one of the most important**. Laboratory experiments have shown that female lobsters require periods of low temperature (<5–8 °C) for ovarian development; if it is warmer, females will begin to transfer energy to molting and reduce spawning effort “*

Citation N. Koopman, Heather & J. Westgate, Andrew & Siders, Zachary. (2014). Declining fecundity and factors affecting embryo quality in the American lobster (*Homarus americanus*) from the Bay of Fundy. *Canadian Journal of Fisheries and Aquatic Sciences*. 72. 1-12. 10.1139/cjfas-2014-0277.

The effluent discharged into the proposed outfall area will range between 25 and 35 degrees Celsius. The study above indicates that climate change is already threatening the fertility of lobster, therefore, it does not seem advisable to release in excess of sixty million litres of warm liquid per day into a lobster breeding area.

This report, prepared by Dillon Consulting, indicates in appendix E3, section 3.3.2.10 that *“at 100 m the effluent plume temperature is 0.2 °C above background”* but later in the report on page 563 the statement is *“Water temperature is anticipated to meet compliance for applicable federal water quality guidelines within approximately 2 m of the diffuser and be within 0.1 °C of background at the end of the 100-m mixing zone.”*

This inconsistency seems to indicate that they are not really sure what the thermal effect will be. I would like to err on the side of caution and have the thermal effect on lobsters more carefully considered.

In conclusion, I feel that the Northern Pulp’s Replacement Effluent Treatment Facility Project, as presented, poses too many risks to species that inhabit our waters and should be rejected.

Sincerely,

From: @xplornet.com
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp
Date: March 6, 2019 9:03:14 AM

This place is a disaster. The information being given out is not the same as what is discussed in house.

Factors are missing in large proportions. There is NO WAY this effluent should be set free in Northumberland Strait. NS has a large business in seafood export, much larger than NP's and much more sustainable too, providing it is NOT damaged by chemicals being allowed to flow into the Strait.

This Pipe is NOT the answer to this problem and should NOT be allowed.

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 9:20:15 AM

Project: replacement_effluent_treatment_facility_project Comments: Its mind blowing to believe that in 2019 this type of pollution should be allowed to continue. I am sorry for the forestry workers that would be effected, but Northern Pulp has been a disaster for this province and I hope the Premier stand firm with his 1 year deadline. Northern Pulp is also responsible for massive deforestation across Nova Scotia, which makes the forestry industry unsustainable for the long term. Now along with putting our old growth forests at risk, they want to target our fishery in the Northumberland Straight. It is time for Northern Pulp to shut down. I believe the job losses of 12,000 are overstated and I have also heard rumors that there are other pulp companies in waiting to take over the mill if Northern Pulp should leave. Northern Pulp has no respect for Nova Scotia or the people that live in this province. Its time for Northern Pulp to shut down and go away! Name: Email: @eastlink.ca
Address:

Privacy-Statement: agree x: 60 y: 22

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Pipe concerns
Date: March 6, 2019 9:36:54 AM

I am sending along my objection to Northern Pulp's pipe proposal. I understand they submitted a class 1 EA. A project of this size and footprint on the environment, health of our ecosystems and people needs a more rigorous review. A Class II assessment is needed to ensure the effluent will not have long lasting effects to fisheries, marine life, environment and health of people. It is very alarming that Northern Pulp did not release the contents of the effluent to the public. The fact that documents obtained from freedom of information act suggest the content be disclosed but they choose to omit it from the submitted EA is very concerning. Why are they hiding it? Boat Harbour is a dead zone! It qualified for a Class II EA. How is this pipe proposal any different and less hazardous? The content going from the pipe into the projected landing zone of the Atlantic Ocean will be as bad or worse then what is being dumped today. This was confirmed by NP Technical Manager in his CBC interview. It is asinine to think that this pulp waste is acceptable to be dumped in the pristine Atlantic Ocean. Current standards for pulp and paper are out dated. Northern Pulp suggested they are meeting those standards. Are 25 year old standards acceptable when there is so much risk involved? Absolutely not! Tests done on fresh water Rainbow trout do not reflect the standards needed to PROVE this effluent is safe. Many of the marine life species that exist in this ocean today are salt water species that have reproduction life cycles around controlled consistent water temperature. Dumping this effluent into the breeding grounds of these species is a disaster waiting to happen. Mercury!! that NP did not include in their EA is present in effluent. Not only will it impact the marine life it will impact and cause harm to those who consume it.. Humans, other fish species, mammals, etc. I also am concerned with the pipe breaking. The unknown chemicals in the effluent now can reach town water supplies adding further risk to public health. The make up of the effluent leaching into the ocean today can already be realized on our shore lines. Look at PLFN and Sinclair beach.. a dark brown foam makes up the shore line. How can we let our children go near the water, swim, and enjoy the coast line if we now have Northern Pulp dumping this toxic pulp waste in the ocean. Everything about this toxic Pipe proposal is concerning. At a very minimum a Class II EA assessment is needed. This is 2019. Polluting our waterways and jeopardizing peoples health is now taken serious and can no longer happen.

thank you.

From: @HOTMAIL.COM
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 11:08:09 AM

Project: replacement_effluent_treatment_facility_project Comments: HI ,I AM A WELDER AND HAVE BEEN GOING IN AND OUT OF THE MILL FOR THE PAST 20 YRS ,IT IS A GREAT PLACE TO WORK AND THE PEOPLE ARE FANTASTIC ,I DONT KNOW WHAT PEOPLE ARE THINKING ,WHEN THEY SAY CLOSE THE MILL ,DO THEY REALISE THAT WILL BE DIVISTATING FOR THE ECONAMY ,ITS A UNFORTUNATE SITUATION ,BUT WE HAVE TO WORK TOGETHER ,THERE WILL BE A LOT OF PEOPLE OUT OF JOBS ,FOREST WORKERS ,TRUCK DRIVERS AND IT GOES ON .I AM LOOKING FOREWARD TO GOING TO THE SHUT DOWN THIS FALL.AGAIN I SAY JUST STOP AND THINK ABOUT IT Name:

Email: @HOTMAIL.COM Address:

: Privacy-Statement: agree x: 58 y: 21

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 11:08:16 AM

Project: replacement_effluent_treatment_facility_project Comments: There are so many reasons *not* to approve Northern Pulps planned Replacement Effluent Treatment Facility. Let me list them in point form: ** There is absolutely no guarantee that this system will actually remove all of the toxins. Even one of NPs own engineers says as much Chronicle Herald, Feb. 28: In an email between Northern Pulp's technical manager and Dillon Consulting, a Toronto-based consulting firm, written on Nov. 29, 2017 the technical manager said in reference to the effluent coming from the proposed Northumberland Strait pipeline, "some say effluent quality will be worse than today because of all the polishing that is happening across the Boat Harbor basin" and they are correct to some extent. ** Contaminated sludge from the effluent treatment system will be burned in the boiler facility -- thus spreading more pollutants into the air -- regardless of scrubbers, there will be some percentage of release. ** Piping the warm, dilute effluent out into the Northumberland Strait is creating an unacceptable and irresponsible risk to humans and to the lobster and other shellfish industry. As commented upon by Dr. John Krawczyk, MD, Kings Head, NS, Nova Scotia Advocate, March 6, 2019. Pumping toxic effluent directly into the Northumberland Strait is not an acceptable alternative for all the above reasons. The effluent will not be toxin free no matter how it is treated and will bio-accumulate in bi-valves mussels, scallops, oysters and lobsters. Seafood will be contaminated. The archaic expression dilution is the solution to pollution is no longer acceptable. Humans are at risk! I would add to this that, not only will we be risking the industry, but also the entire ecology of the surrounding Northumberland Strait. All shellfish are extremely sensitive to toxins -- and also to temperature and to acidity in water as their shells are formed of calcium. I have thus far seen no proof that there wont be damage to the shellfish and other aquatic flora and fauna of the Strait. In fact, I have read the opinions of several marine biologists that such effluent could be extremely harmful to shellfish. And I quote from a study on just such effluent: Untreated pulp and paper mill effluents are very toxic to most aquatic life. Concentrations as low as two percent can be acutely toxic to fish. Sufficient treatment can render the effluent essentially nontoxic much of the time however, treatment processes used by most mills reduce toxicity but do not eliminate it. Even effluents receiving good treatment may exhibit sporadic and dynamic increases in toxicity due in part to spills or dumping of spent pulping chemicals. Sublethal exposures to aquatic organisms to pulp effluent may affect a number of their physiological and behavioral functions. Toxicity of Pulp and Paper Mill Effluent: A Review of Literature:, Floyd E. Hutchins, Western Fish Toxicology Station, Corvallis, Or. ** There are now serious questions being asked about missing mercury at that site, and the building a new facility on mercury contaminated soils see Northern Pulps Environmental Documents: Missing Mercury, etc.. by Joan Baxter, Halifax Examiner, March 5, 2019 ** Perhaps the greatest and most damning reason of all is that, for 50 years, this mill has subjected the people of Pictou to terrible pollution, egregious health hazards, and obnoxious odours. Regardless of what improvements have been made, it has been more of the same old, same old. How much more should they, ESPECIALLY the people of Pictou Landing First Nations, be expected to endure? That this terrible environmental racism has been allowed to persist to this day is reprehensible. This latest plan to now pipe effluent into the Strait is just more of the same. Enough is enough. Name: Email:

@gmail.com Address:

Privacy-Statement:

agree x: 72 y: 27

From: @smu.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 12:03:40 PM

Project: replacement_effluent_treatment_facility_project Comments: By Page number: xxxv
" In addition, NPNS has had a Toxicity Prevention and Remediation Plan in place for many years which provides a structured approach for addressing treated effluent toxicity problems, should they occur. -this seems to conflict with the above table, in that " ~Accidents, Malfunctions, and Unplanned Events" are all deemed to have non-significant environmental effects. If the effects of any unplanned events are non-significant, why would a remediation plan ever be needed? 8 " "Reduced greenhouse gas emissions by replacing fossil fuels with natural gas" -this is great, but "natural" gas is, in fact, a fossil fuel, and one that also needs to be reduced considerably in the next decade and beyond Stocker et al. 2018. Are there plans to convert to even lower-carbon power-sources or offset additional CO2 emissions? 25 and 115 "chloride ion is naturally present in salt water, in the form of sodium chloride. The presence of chloride in the ocean does not represent a concern for the environment. -while this may be true in the general sense, it is a logical leap and could be perceived as misdirection. It's like saying that Aluminum tailings are not of concern because it is a naturally-occurring element in reality, Aluminum is one of the most widely occurring natural metals, but when soils are acidic it can become toxic to plants because it preferentially binds to sites normally occupied by base cations at neutral pHs. In other words, the environmental context, and concentrations, are what cause the problems for many naturally-occurring ions, including most salts. Presumably, marine-life in the proposed area is adjusted to "natural" chloride concentrations of water in the Northumberland Strait. If increases of Cl- concentrations are expected to be within the tolerances of marine life, and within the range of historic variability for a particular diffusion area, the proponents should say that instead of simply regarding the ion as unimportant. 29 "not a current technology" - please define "current technology" 86 section 5.6.4 and 417 section 8.12.3.1 " -these sections may have relevance for North Atlantic Right Whales not mentioned directly in the report, because they are not normally known from the Northumberland Strait waters and other marine mammals because the marine component of the pipeline involves underwater noise and traffic. While the sound levels may not be sufficient to cause acute hearing damage, similar construction projects have shown clear impacts on the behaviour of marine mammals in other jurisdictions Culloch et al. 2016. Some additional monitoring and modification of construction schedules may be necessary to avoid 1 increasing stress to these animals and 2 displacing them from feeding grounds. DFO should be consulted for more specific recommendations. 121 "othe findings of this study cannot be considered conclusive or causal in any way. -this choice of language is overly defensive and only serves to cast doubt on the proponents. The cited study was not perfect, but the lead author DID write "In the field, Mytilus caged near untreated municipal wastewater and bleached kraft pulpmill effluents have a significantly greater chance of developing haemocytic leukemia than do mussels exposed to reference sites. -Consequently, saying that it can't be conclusive or causal "in any way" is neither accurate nor honest. Moreover, taking the old-fashioned industry-to-public communication approach, wherein an appropriate question based on peer-reviewed research is responded to using the triumvirate of conflate lots of things cause this, deny we don't know what causes this, and attack the study was flawed! is clearly not objective, and I think the proponents can do better. I recommend an "acknowledge, critique, and explain" approach instead. E.g., "Yes, the cited study drew this conclusion, and it is concerning. No, the study was not perfect in its attributions of cause and effect, so we

followed-up with the lead author should provide a more detailed account of this discussion for accuracy. In the end, we believe the NEW facility will be better / worse pick one. It might also be a good idea to commit to a follow-up biomonitoring study once the harbour has been reclaimed. 332-333 Mitigation and Construction Phase -it would be a good idea to do some quick nest surveys for those barn swallows, as their nests might be in existing structures near the ETF footprint. If that is the case, the construction phase should avoid conducting work during the nesting season, to avoid displacing the birds or interrupting their foraging patterns through excess noise and emissions. Literature Cited: Culloch, R.M., Anderwald, P., Brandecker, A., Haberlin, D., McGovern, B., Pinfield, R., Visser, F., Jessopp, M., and Cronin, M. 2016. Effect of construction-related activities and vessel traffic on marine mammals. *Mar. Ecol. Prog. Ser.* 549: 231-242. doi:10.3354/meps11686. Stocker, T.F., Qin, D., Plattner, G.K., Tignor, M.M.B., Allen, S.K., Boschung, J., Nauels, A., Xia, Y., Bex, V., and Midgley, P.M. 2018. Global warming of 1.5°C. In Report of the Intergovernmental Panel on Climate Change. doi:10.1017/CBO9781107415324. Name: Email: @smu.ca Address:

Privacy-Statement: agree x: 72 y: 26

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp
Date: March 6, 2019 12:21:06 PM

I am writing this email in regard to the Northern Pulp effluent disposal proposal. Please know as a young professional that moved back to Nova Scotia from Alberta I am strongly opposed to the proposal and can not possibly believe that anyone would even consider this as a viable option. Furthermore my husband's occupation will be directly impacted if the plant is to close and he could very well lose his job however still we do not support this as the risks associated with the plan impact our community and family far more than those associated with a job loss. We need to think of the long term health of our environment and community; we are resilient we will flourish if the mill closes. Please do not focus on the fear of a few in this monumental decision. My family swims fishes and uses our straightthink of the fisheries the tourism the health that can be negatively impacted unless you can guarantee 100% that this will not be the case . This proposal can not be passed it can not move forward too much is at risk . You have put the environment and people at risk for too long. Do what is right to what is best for the greater good . Do not think of your job loss do not let fear of job loss outweigh the unknown of our environment.

Respectfully submitted

From: @nnseafoods.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 12:46:17 PM

Project: replacement_effluent_treatment_facility_project Comments: I am writing to you as a concerned citizen and an employee of North Nova Seafoods in Caribou, NS. This plant provides jobs year round to 150 people as well as supporting hundreds of Fishermen. These jobs will cease to exist if this pipe is allowed to go as planned by Northern Pulp. I am also concerned about the environment and health of those of us living in Pictou County. Name:

Email: @nnseafoods.ca Address:

:

Privacy-Statement: agree x: 68 y: 17

From:
To: [Environment Assessment Web Account](#)
Subject: Call for the rejection the Northern Pulp Effluent Treatment Project
Date: March 6, 2019 1:06:21 PM
Attachments: [Northern Pulps rejection request.docx](#)

March 2 2019

Northern Pulps proposal to pump effluent into the Northumberland Strait must be rejected because of the significant adverse effect that it will have on the Strait.

I was born and raised in Pictou county. I have fished the waters of the Northumberland Strait for 30 years. There was a time when we did not think much about the effects our actions had on the ocean. We see now firsthand how fragile the ocean is. We now work with DFO to preserve an ecosystem, an industry and a way of life. We have reduced our lobster trap numbers from 300 to 280, stopped fishing single trap trawls and are increasing the carps size. We have also increase the web size of our herring nets to allow the small fish to go free. In recent years we have seen the Northumberland Ferries Limited and the town of Pictou implement sewage systems, so that they no longer dump their sewage into the ocean . Land owners along the Strait have built sea walls to stop erosion and the accompanying sediment. And these changes are working. The last several years have seen an increase in lobster catches in our area. Sustained scallop seasons.

Proving that our oceans and fishery are sustainable is very important to the world. Dumping industrial waste into the ocean does not constitute Sustainability. This is a step backwards for Nova Scotia ...for Canada.

"Our Oceans, Our Future

As Canada's Minister of Fisheries and Oceans, it gives me great pleasure to present Canada's Oceans Strategy. This far-reaching policy framework will make Canada's vision for modern oceans management a reality.

As a country bordered by three oceans, Canada is truly an oceans nation. Today we see an ever increasing number of demands on oceans and their resources. While traditional fishing and marine transportation continue to be of prime importance, they are now joined by other uses, such as aquaculture development, oil and gas exploration and development, recreational and commercial fishing, and eco-tourism. Canada's oceans also support important features of Canada's social and cultural identity. Managing these demands is critical to the protection of the marine environment and the long-term sustainability of Canada's oceans and their resources.

On January 31, 1997, the Government of Canada brought the Oceans Act into force, making Canada the first country in the world to have comprehensive oceans management legislation. The Act authorizes the Minister of Fisheries and Oceans Canada to lead the development of a national oceans management strategy, guided by the principles of sustainable development, the precautionary approach and integrated management."

source: Robert G. Thibault

Fisheries and Oceans Canada, Oceans Directorate, *Canada's Oceans Strategy*, 2002, Cat. No. Fs23-116/2002E, Ottawa - Ontario: Fisheries and Oceans Canada 2002, iii

My fishing grounds are the waters along Caribou Island. It is an extremely fragile area. It is extremely sensitive to water temperature changes. If we get a Nor-Eastern the water becomes brown with sediment. It takes several days for the sediment to clear and fish to return. Northern Pulp proposes to dump 90 million litres of effluent per day on this area. Northern Pulp estimates that the propose pipe will dump 48mg of Suspended Solids per litre into the Strait. **For a grand total of 4.32 tonnes of Suspended Solids per day.** This is daily. That is 1,576 tonne per year. The area will never have a break / never be given a chance for it to recover. *The long term effects of this have to be studied.*

"5.6.1 Replacement ETF Effluent Discharge

Adsorbable Organic Halides (AOX) mg/L 7.8

Total Nitrogen (TN) mg/L 6.0

Total Phosphorus (TP) mg/L 1.5

Colour TCU 750

Chemical Oxygen Demand (COD) mg/L 725

Biochemical Oxygen Demand (BOD5) mg/L 48

Total Suspended Solids (TSS) mg/L 48

Dissolved Oxygen (DO) mg/L >1.5

pH - 7.0 to 8.5

Temperature oC

25 (winter)

37 (summer)

Total Dissolved Solids (TDS) or Salinity g/L 4

Additionally, the project is designed with key established water quality guidelines and/or will meet ambient water quality (current background) at the edge of a standard mixing zone (CCME 2009 - Canada-wide Strategy for the Management of Municipal Wastewater Effluent)."

source:(NP EP Proposal)

The sediment from the construction of the pipe alone will be catastrophic. We have witness firsthand the significant adverse effect that the construction of the Confederation Bridge, in 1993, had on the fishery. It has taken about twenty three years for lobster stocks to return up to 90km away. This was a finite project, with a recovery time. The proposed NP is a constant 4.32 tonnes per day! Every day.

I've always had a sense of pride about living in Nova Scotia, Canada. I've felt that we were moving forward towards a greener country. Northern Pulps proposal to dump effluent into the Northumberland Strait is a step backwards. **I am asking you to Reject the proposal on the grounds that the significant adverse effects cannot be mitigated.**



From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 1:22:24 PM

Project: replacement_effluent_treatment_facility_project Comments: The EA decision should be based on science, not emotion or hearsay. NP should be given a chance to make this work, the mill is far too important to the larger NS forest industry to let fail without a reasonable attempt to do it right, and if an extension to the BH Act is needed, it should be granted. Name:

Email: @eastlink.ca Address:

: Privacy-

Statement: agree x: 64 y: 25

From:
To: [Environment Assessment Web Account](#)
Subject: Fwd:
Date: March 6, 2019 1:40:15 PM

Dear Minister,

I am writing to disclose my concerns with Northern Pulps new treatment facility. First off, I would like to describe my frustration with this environment assessment in the sense that I do not find it fair to read through 1700 pages and only have 30 days to respond to you in regards to the many topics I find appalling.

The many issues I have with this proposal are numerous. I would like to describe the sections I find troubling which must be considered by yourself in formulating the decision under subsection 34(1) of the Environment Assessment Regulations.

a) The location of the proposed undertaking and the nature and sensitivity of the surrounding area: Having grown up in Pictou and New Glasgow, I have worked on the water and lived in this surrounding land area. I am unsure how a pipe would be able to bypass a colony of protected birds which are found near the Pictou Causeway, Munro's Island, Caribou Provincial Park, and Water Side Provincial Park. This area is known to be a habitat for species at risk, and I would like to be informed with how this pipe would not alter life of various marine and land species. These migratory and salt water habitat birds that are on the species at risk, listed as threatened, endangered within the footprint of the pipe proposal.

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c) My concerns expressed should be seriously noted. I will refuse to live in this area or province if you shall allow a pipe of poison and sludge system of this nature to be granted. I will not allow myself or my family to suffer to this level of criminal environmental behavior. I have attended various committees and understand the EcoJustice may be following this case to the Supreme Court level. At this time, this level of jurisdiction has granted Pictou Landing First Nations to be considered and consulted by this company for any future construction. I would hope you would be on the right side of history in regard to this serious case of environmental racism this group has already endured for the last 53 years. I stand firm in support, as do many of my friends and family with the closure of Boat Harbour and will not support an extension of any sort for Northern Pulp to continue using Boat Harbour for a treatment facility of their poisonous waste.

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degrade within hours to days, whereas highly chlorinated organic compounds may persist from days to weeks or longer. Persistence may be longer in winter, especially under ice. Some chlorinated organic compounds can be biologically degraded or transformed and transformation may lead to more persistent and bioaccumulative compounds. Chloroveratroles, for example, transformation products of chloroguaiacols which are unique to bleached pulp mill effluents, are capable of accumulating in fish up to 25 000 times the concentration in water. Seventy-five percent of Canadian bleached pulp mills discharge effluents that are acutely lethal to fish, sometimes at concentrations as low as 3.2% effluent. A few individual chlorinated organic compounds in these effluents approach or surpass concentrations that cause mortalities in aquatic organisms ranging from algae to fish.

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diffusers to discharge the effluent? Why is that Northern Pulp was allowed to release a proposal without holding ANY new public information sessions for the public in regards to this new location?

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Thank you for reading my letter of distress.

A very concerned local resident of Pictou County-

From:
To: [Environment Assessment Web Account](#)
Subject: Environmental assessment response northern pulp
Date: March 6, 2019 1:48:49 PM

To whom it may concern

Am very concerned about the proposed plan to dump effluent into caribou harbour, I fish lobsters in Wallace west of Pictou, and I think it's a joke in 2019 we are talking about having an industrial plant dispose of its waste into any body of water let alone a free flowing ocean

My concern is the impact on my fishing industry, how do we truly know that the effluent coming out of the proposed pipe won't kill all the fish and furthermore who will be crazy enough to purchase the seafood if they actually do survive because everyone nation and world wide would know that those lobsters crab herring etc swim in mill run off

I thank you for your time really hope to see environmental racism come to a halt or someone will be on the hook for large amounts of money..we say no pipe!!

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 1:57:26 PM

Project: replacement_effluent_treatment_facility_project Comments: No! Just a big no! Be responsible, stop polluting our oceans, our air, our land, our future. Be smart! Name:
Email: @eastlink.ca Address:

Privacy-Statement: agree x: 67 y: 34

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 2:21:07 PM

Project: replacement_effluent_treatment_facility_project Comments: This new Effluent Treatment Facility is state of the art and a leap in science with the latest technologies. I fully 100 approve it. It would be total and absolute financial insanity for the Province of Nova Scotia to shut down the pulp mill when it is proven beyond the shadow of a doubt that both Industry Forestry fishing can co-exist together as they already do in other Provinces in Canada. Furthermore Northern Pulp MUST be given an EXTENSION past the January 2020 deadline, for the proper installation of the pipe and construction of the new treatment facility.

Name: Email: @hotmail.com Address:

Privacy-Statement: agree x: 57 y: 21

From:
To: [Environment Assessment Web Account](#)
Subject: Writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 6, 2019 2:28:47 PM

I have lived in the town of Pictou for over 50 years. Back then (pre-mill), it was a vibrant town with all the amenities. It is a town steeped in history. I will forego all of what was to offer and go straight to the point. As a young boy I remember when the pulp mill opened. I vaguely remember the foul smell and the reported flakes of a substance that was landing on peoples' cars.

52 years on into the future. I now own that house in which I lived as a young boy – *a circa 200 year old* house that sits prominently on the Pictou Harbour waterfront, with Northern Pulp in the background.

I know the pulp mill well. I grew up with it. I even worked there for a couple months in the early 80s in the spring after my 1st year and 2nd year of university – I worked in the woodlands division when it was Scott Paper. Nevertheless, we now are 35 years beyond that time and I have since witnessed a decaying plant and the simultaneous decline of a community, in part due to the effects of this putrid and rancid smell that often is emitted from those stacks. Today, all of the windows in my house that face south (toward the mill) remain closed permanently. I dare not open in case that waft of sickening air permeates into my living space. Further, I am a runner. I run daily. As soon as I awaken, I must look out the window toward the mill. The wind direction dictates the direction in which I run. Unfortunately on some days, when the wind is from the due south, there is no escaping the foul smell. What am I breathing? Does anyone seriously believe that these odours are harmless? Is this Soviet Union or East Germany of the 1960s?

Pictou's air quality is not of its own doing. This mill is not even in our civic community. It is located across a body of water in the rural municipality of Pictou – a political unit unto its own. People of the town have borne the brunt of this bad air simply due to geography and meteorology. That is, the prevailing winds – primarily blowing from the south and southwest – directly in the path toward our little community.

I have listened and read intently to all of the discussions about the mill. My conclusion is that the behaviour of this pulp mill and its current state is beyond resolve. Its egregious violations, its displays of greed, its lies and half-truths, its ignorance, its poor stewardship of the land, and its disrespect of the lives of citizenry deem this mill to be not worthy of supporting.

Mercury, sludge, toxic, chemical effluent, stench, contamination, cover-up --- these are but a few of the words that go hand-in-hand with this company. There are many other words I am sure. To those Who say it is "the smell of money", I say it is the smell of illness, of cancer, and of death. To the supporters of the mill – the saw mill operators and truck drivers, please come

live in the town of Pictou. Bring your families. Enjoy the stench. Real estate is cheap – house prices have been stagnant for 30 years.

Tell me – which community would accept a pipe carrying toxic chemicals to pass through their watershed? Citizens of Halifax – would you accept this? Citizens of anywhere in Canada – would you accept this?

Of course not. Further, the gall of Northern Pulp to propose that the pipeline be diverted toward the very town which bears the brunt of its toxic shit, then crossing its water source, then proceeding into the Northumberland Strait – right below the waters of the very fishermen who are actively opposing your ill-thought solution. Unbelievable!

I have focused primarily on my own perspective in this letter – from a resident of the town of Pictou. It goes without saying that the good people of Pictou Landing and the Boat Harbour situation is deplorable. I applaud chief Paul for her stance. I also applaud the efforts of the fishermen in protecting their industry.

“No to the effluent plan”. Instead of a 21st century solution to a problem, Northern Pulp has offered a very poor 19th century solution. It is clear that the pulp mill is well past its *best-before* date.

I am not naïve to know that there would be economic consequences to whichever decisions are made. I understand what the mill was, but that is now history. Our world has changed. Yes, I understand the jobs discussion. After a mill closure I am confident that a new equilibrium will emerge. We cannot be afraid of change. I want to be on the side of right. In 100 years will the narrative be about propping up a pulp mill that pollutes, that pillages our forests, destroys the environment, and destroys communities, or do I want to be part of a narrative that takes back our pristine province. We are on the cusp of being a “1 million inhabitants” province. Time to shed the old ways and embrace our new strengths.

NO PIPE OVER LAND NOR IN STRAIT

From:
To: [Environment Assessment Web Account](#)
Subject: Letter concerning Northern Pulp
Date: March 6, 2019 2:34:30 PM

Dear Minister,

I am writing to disclose my concerns with Northern Pulps new treatment facility. First off, I would like to describe my frustration with this environment assessment in the sense that I do not find it fair to read through 1700 pages and only have 30 days to respond to you in regards to the many topics I find appalling.

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Bleach Chlorine Mills and the Impacts on Marine Life:

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A very concerned local resident of Pictou County-

Sent from my iPhone

From:
To: [Environment Assessment Web Account](#);
Subject: Correction Re: EA Comments on Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 6, 2019 3:14:29 PM
Attachments: [EA Commnets on NPNSC's Replacement Effluent Treatment Facility Project](#) .docx

My apologies, could you please disregard the previously attached comments and file this version instead.

Thank you

On Wed, Mar 6, 2019 at 3:06 PM

[@gmail.com](#)> wrote:

Good Afternoon,

Please see attached comments on Northern Pulp Nova Scotia Corporation's Replacement Effluent Treatment Facility Project. If confirmation that these comments were revived could be provided that would be appreciated.

Regards

**Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, NS, B3J 2P8**

Please see below our joint comments on the ***Environmental Assessment for a Replacement Effluent Treatment Facility Project by Northern Pulp Nova Scotia Corporation.***

We are an environmental engineer and a biologist from Pictou, NS, so this project is of significant importance for us both personally and professionally. We frequently visit the Northumberland Strait area of Pictou with our families for recreation and also have many friends and family who live in Pictou; so being assured that the new effluent treatment plan by Northern Pulp will not jeopardize the environmental conditions of the area is extremely important for us.

After reviewing the environmental assessment (EA) submitted by Northern Pulp Nova Scotia Corporation it is our mutual opinion that much of the supporting information submitted as part of this Class I EA is incomplete. This is presumably due to the project timeline and that significant components of the proposed project required a redesign which only commenced in late 2018. The redesign of the effluent discharge system was required in order to avoid ice scour in the originally proposed Pictou Road effluent discharge area. The project team should be commended for making this change to avoid potential environmental impacts resulting from damage to the proposed effluent diffusers, however, **the scope of the environmental assessment should not be reduced (or finalized after EA approval) given the need for a project redesign.**

In many cases field work that was completed for the original design was used for the redesigned project. There is a significant difference between the original project scope and the redesigned project as presented in the EA; namely the introduction of a 15.5km pipeline and an entirely new location for discharging the treated effluent into the marine environment. Critical information is missing from the submitted EA including any biological assessments along the routing of the on land pipeline (which passes through the watershed for the Town of Pictou's municipal groundwater supply) and no marine habitat surveys were completed in the area now proposed for treated effluent discharge.

Additional, the EA relies heavily on the 1992 Pulp and Paper Effluent Regulations (PPER) which are part of the Fisheries Act. The report states that *"The effluent is anticipated to meet compliance with federal PPER."* It should be noted that the EA provides no evidence to support this statement. No calculations of maximum total suspended solids (TSS) or biochemical oxygen demand (BOD) (which is how the PPER regulates effluent) are provided.

A status report on the PPER was published by Environment & Climate Change Canada (ECCC) in 2012 (<http://publications.gc.ca/site/eng/420919/publication.html>) which found that a review of environmental effects monitoring (EEM) data from active pulp mills indicates that *"...some effluents appear to continue to cause effects on fish and/or fish habitat."* Further, a consultation document on the proposed modernization of the PPER prepared by ECCC in 2017 (<https://www.nben.ca/en/marine-fisheries-aquaculture?download=5045:proposed-modernization-of-the-pulp-and-paper-effluent-regulations-consultation-document-environment-and-climate-change-canada-september-2017>) noted that *"effluents from 70% of pulp and paper mills are impacting fish and/or fish habitat and the impacts at 55% of these mills are indicative of a higher risk to the environment."* This is despite the fact that

“Effluent samples from these mills were compliant with BOD and SS limits 99.9 percent of the time, and were non-acutely lethal to fish 97.6% of the time.” As indicated in the consolation document ECCC are currently working to modernize the PPER and are aiming to publish proposed amendments to the PPER for comment in 2019. Clearly Northern Pulp Nova Scotia Corporation are only required to adhere to current regulations, however, the work being conducted by ECCC should be considered when assessing the potential for cumulative environmental effects of the proposed project. ECCC’s findings indicate that compliance with the 1992 PPER itself does not guarantee that there will be no adverse effects to the marine environment. NSE should exercise a precautionary approach when determining the potential for adverse environmental impacts of the proposed project.

Lastly, we are concerned that a Class 1 EA was deemed appropriate for this project. On NSE’s website it is noted that *“Class 2 undertakings are typically larger in scale and are considered to have the potential to cause significant environmental impacts and concern to the public. These types of developments include, but are not limited to, solid waste incinerators, petrochemical facilities and pulp plants”* From existing mill operations the proposed project involves an entirely new effluent treatment system, a new process to burn waste sludge (from the new effluent treatment plant) in the mill’s power boiler, a new 11.4 km on land pipeline, a new 4.1 km marine pipeline (involving marine trenching and possible construction of a small jetty for installation) and an entirely new marine discharge location. Given this **it is our opinion that a Class II EA should be required.** While initially it was agreed that a Class I EA was sufficient by NSE, the scope of the proposed project has changed significantly (as noted above) since that time.

Based on the comments above and below, in particular the lack of land based and marine biological assessments and indications from ECCC that active pulp mills complying with the federal PPER are actually impacting fish and/or fish habitat **we would implore NSE to not approve this project at this time.**

Please see the table below with more specific comments.

Respectfully,

Section	Comment
2.3 para. 7, 8	<p>The report indicates that “...it was not possible to conduct field work in the new pipeline corridor or marine environment in order to inform this EA Registration” The rationale for not completing these biological assessments is that an alternative pipeline route and discharge location was identified in fall 2018 due to the presence of ice scour found in the originally proposed treated effluent discharge location. Presumably the timing of this discovery would have not allowed for biological field investigations in 2018.</p> <p>The report indicates that “Follow up field work as appropriate for the work proposed will be completed in parallel to the EA Registration review...”. The full extent of biological impacts cannot be assessed without proper field work first being undertaken.</p> <p>The scope of the assessment should not be lessened due to construction time constraints and design delays based on site conditions As per the proposed project schedule, the project will not be completed prior to legislated closing of the BHETF anyways. NSE should require full biological assessments, which could be conducted in spring / summer 2019, prior to approval.</p>
5.2.2.9 Table 5.2-1	Table 5.2-1 (also presented in Table 5.6-1) provides information on the anticipated daily maximum treated effluent water quality as reprinted from the Receiving Waters Study (Appendix E). The Receiving Waters Study indicates that this data was provided by KSH (the design consultant for the effluent treatment system). No supporting documentation was provided from KSH as part of the EA submission. How was the treated effluent water quality data presented in Table 5.2-1 and Table 5.6-1 calculated? What level of accuracy is the data?
5.3.2.5	Given the majority of the pipeline will be buried under 1m of fill or asphalt how will inspection of pipeline condition be conducted? The report indicates visual inspections be conducted.
5.4	The proposed project schedule indicates that the new effluent treatment facility would not be completed prior to the legislative closure of boat harbor effluent treatment facility (BHEFT) as per the Boat Harbor Act. The NS provincial government has stated publically that an extension will not be provided for the BHEFT. Is the proposed project even viable?
5.4 Table 5.4-1	<p>The report indicates that the assessments listed below are not yet completed:</p> <ul style="list-style-type: none"> • Avian / turtle follow-up field studies, • MEKS field surveys, • Vegetation, wetland and watercourse follow-up field studies, • Marine seismic, geotechnical and habitat surveys <p>The potential environmental impacts of the proposed project cannot be fully assessed with this work not yet completed, in particular the marine habitat surveys. NSE should require these assessments be completed prior to granting approval.</p>
5.7.2.7, 7 th bullet	The report indicates that “Scheduling of project activities will be coordinated through consultation with local fish harvesters, Northumberland Ferries and other stakeholders and best-efforts will be made to schedule activities to minimize interference” As per table 4.5.1 the proposed schedule for the construction of the marine pipeline is April / May 2020 – Oct. 2020 which entirely

	overlaps with lobster fishing season as well as the Northumberland Ferries operational season. The proposed project would likely be very disruptive to Lobster fishing as well as to Northumberland Ferries.
8.7.2.5	The report indicates that no field assessments for wetlands in the pipeline footprint area were completed due to the pipeline redesign required in fall 2018. Functional assessment information is only provided for WL-1 and WL-2 within the effluent treatment facility (ETF) footprint. Some of the wetlands in the pipeline footprint area would likely be considered wetlands of special significance by NSE given their location within a source water protection area or their type being salt marsh. The assessment of potential impact to wetlands cannot be determined without proper field assessment and functional assessment work being completed. This work should be completed prior to NSE making a decision on the proposed project.
8.12.2.3, para. 5	To describe benthic invertebrate habitat the report references a marine habitat survey completed by AMEC in 2015 for a different project. Does the AMEC habitat assessment cover the full extent of the marine project footprint area for the proposed project? It appears that no marine habitat survey was completed specifically for the proposed project. A new marine habitat survey should be completed prior to NSE making a decision on the proposed project.
8.12.3.3 para. 10	<p>The report states that <i>"Effluent quality will necessarily comply with all federal and provincial permit conditions and regulatory requirements such as PPER."</i></p> <p>Has a calculation been completed to confirm effluent will comply with the PPER? The PPER sets maximum daily and monthly limits on BOD and TSS based on the mill's reference production rate. What is the reference production rate for the mill? This information along with the concentrations of BOD and TSS in the treated effluent and flow rates (both provided in the EA report) could be used to calculate compliance with the PPER. This information does not appear to be provided.</p>
8.12.3.3 para. 10	<p>The report states that <i>"It was determined in the receiving water study (Stantec 2018; Appendix E) that water quality at the end of the mixing zone for the three-port diffuser will reach ambient conditions within less than 2 m from the diffuser in terms of total nitrogen, total phosphorous, TSS, DO, pH, and salinity. Colour will return to baseline conditions within 5 m of the diffuser. Temperature will be within 0.1 °C of background at the end of the 100-m mixing zone."</i></p> <p>It is noted that given the project redesign initiated in fall 2018 no background water samples were collected from Caribou Harbour, therefore, background water quality data from the previous discharge location at Pictou Road (6km from the current proposed discharge site) was used. How can it be concluded that water quality will return to ambient conditions within 100m of the diffuser when no background water quality samples were collected in this area? Also no background information was collected for AOX, COD, or BOD. NSE should require the collection of background water samples from the proposed effluent discharge location before approving this project.</p>
9.2.4.2 Para. 3	The report indicates that <i>"Due to uncertainty regarding effluent composition and approximate concentrations of substances present in the future treated effluent (which will not be verified until the project is operational), the identified candidate COPCs in effluent are considered preliminary at this time."</i> How can cumulative human health and environmental effects be determined to be non-significant given that the chemical composition of the treated effluent is not fully known?

10.4.3.1	<p>The mitigation measures provided for an accidental release of treated effluent from the pipeline or the effluent treatment facility are construction specifications and a proposed maintenance and inspection program. If a leak is encountered the mill should be required to stop operations (cease effluent flow). Further, what is the risk to groundwater if a leak occurs in the land-based pipeline? This is not discussed in the report and is of particular concern given that the pipeline crosses through the watershed for the Town of Pictou's municipal well water supply.</p>
10.4.4.1	<p>As a mitigation measure for potential damage to the treated effluent diffuser the report states that <i>"Given the strong currents of the Caribou Channel at the outfall location significant diffusion is still likely to take place without the diffuser nozzle(s) in place;"</i> While the Receiving Waters Study (Appendix E) indicates that effluent would predominantly be transported with offshore current there are several scenarios where far-field modeling results indicate effluent intrusion into Caribou Harbour. Given the proposed treated effluent discharge area is known to have ice present what is the likelihood of diffuser damage and what are the cumulative effects of treated effluent intrusion into Caribou Harbor?</p> <p>The report indicates that <i>"Upon detection of any marine outfall pipe damage or diffuser fouling, repairs would be promptly performed;"</i> the mill should be required to stop operations (cease effluent flow) in this scenario.</p>
12.2 Groundwater VEC	<p>The report indicates that interactions between the project and groundwater are not anticipated. The rationale for not including groundwater as a valued ecosystem component (VEC) is that <i>"...it is unlikely that groundwater from the PFA (project footprint area) would affect residential water supplies."</i> Is groundwater for municipal use considered in this section? It appears only private residential wells were considered. The potential for impacts on the town of Pictou's municipal well water should be considered.</p>
12.3.8.1, para. 7	<p>The report states that <i>"...any potential environmental effects on water quality during the operation and maintenance phase will be highly localized."</i> and <i>"that water quality at the end of the mixing zone for the three-port diffuser will reach ambient conditions within less than 2 m from the diffuser in terms of total nitrogen, total phosphorous, DO, pH, temperature, and salinity. Colour will return to baseline conditions within 5 m of the diffuser."</i></p> <p>What is the cumulative effect of absorbable organic halides (AOX) which include Dioxins? As per the Receiving Water Study background concentrations of AOX is n/a (assumed to be negligible). The treated effluent contains a concentration of 7.8 mg/L of AOX with a concentration of 0.05 mg/L at the end of the mixing zone 100m from the diffuser. Given the high volume of treated effluent discharge at 62,000,000 L / day and the 50 year projected lifespan of the project what are the long term impacts of AOX presence above existing conditions? This is of particular importance given that AOX are known to be persistent and accumulate in the environment. (https://webarchive.nationalarchives.gov.uk/20110313212212/http://www.environment-agency.gov.uk/business/topics/pollution/39123.aspx)</p>

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 3:38:49 PM

Project: replacement_effluent_treatment_facility_project Comments: Hello, Firstly, Id like to say that it is ludicrous to even consider a proposal for a pipeline carrying partly treated pulp mill effluent through the Town of Pictou watershed on its way to an important fishing area. Already the presence of the toxins from the effluent in Boat Harbour, and the leaks that have happened mean that people in Pictou Landing First Nation and in the Pictou Landing area in general have good reason to distrust the safety of the aquifer. Why take this same risk for the Town of Pictou? Please prioritize the health of the forests, all the life in the Northumberland Straight and the safety of the air we breath, when making your decision. If any of these deteriorate more than they already have, human communities in the area will suffer. This mill has a terrible colonial history from the very beginning, when the Nova Scotia Water Authority gained permission from Pictou Landing First Nation to use Boat Harbour for the mills effluent by pretending that a not yet in use sewage lagoon near Saint John was a treatment facility for the nearby pulp mills waste water. This continued with a series of broken promises by Nova Scotia governments to close the Treatment Facility. Now that it is finally slated to close, Chief Andrea Paul has made it very clear that Pictou Landing First Nation does not agree with the mills proposal for a new waste treatment process that would mean the discharge of partly treated effluent into the Northumberland Straight. Please break from the colonial way of doing things and respect the people of Pictou Landings right to free, prior, informed consent about developments affecting them, according to the United Nations Declaration on the Rights of Indigenous Peoples. Canada has ratified this dec laration, so we should abide by it. The answer should be no! Please dont approve this pipe because if it cannot go ahead the mill might close and that would be a very good thing because it would give the environment a chance to recover. This includes the air, the waters of Boat Harbour and the Northumberland Straight, and the forests which have endured years of clear-cutting, whole tree harvesting and spraying. Besides the ecological benefits of the closure of the mill, other kinds of economic activities that are hampered by the pollution from the mill could flourish if it were to close. There is a climate emergency on earth caused by human activity. We need to do our part to curb greenhouse gas emissions and preserve the ability of ecosystems like forests to absorb carbon dioxide. The closure of the mill would be an opportunity to change forestry practices in the province that could lead to an end to clear-cutting. This would be a step in the right direction for the climate and for the sake of the forests themselves as living entities. Successive federal and provincial governments have pandered to the will of the various owners of the pulp mill at Abercrombie Point since its construction was first proposed. Your government has shown you can stand up to the mill owners by not extending the deadline for the closure of the Boat Harbour Treatment Facility. Please stand up to them now and refuse to approve this preposterous proposal. Thank-you,

@gmail.com Address:

Name:

Email:

Privacy-

Statement: agree x: 70 y: 19

From:
To: [Environment Assessment Web Account](#)
Subject: Pulp Mill
Date: March 6, 2019 4:26:26 PM

I am against giving the pulp mill any right whatsoever to pump any pollutants into the water surrounding Nova Scotia. I am against the pulp mill in every way. I do not want them to have the right to harvest our crown land, and think we should have a small sustainable forestry plan for the province. I do not believe a foreign owned company should have rights to our land. Letting them pump pollutants into our water is unacceptable.

Thank You,

Teacher, HRCE

From: @petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:40:58 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:41:27 PM

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Thank you.

Signed by:

@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:43:48 PM

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Thank you.

Signed by: @eastlink.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:43:50 PM

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Thank you.

Signed by:
@ns.sympatico.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:43:50 PM

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Thank you.

Signed by:

@me.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:45:39 PM

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Thank you.

Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:48:34 PM

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Thank you.

Signed by:

@eastlink.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:50:45 PM

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Thank you.

Signed by:

@northernpulp.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: Soutien à l'évaluation environnementale de Northern Pulp
Date: March 6, 2019 4:53:39 PM

Je vous écris pour appuyer la demande d'évaluation environnementale présentée par Northern Pulp pour sa nouvelle installation de traitement.

On a beaucoup parlé de Northern Pulp et de ses répercussions sur la collectivité locale. Je suis d'accord avec beaucoup de gens, y compris Unifor, pour dire que Boat Harbour doit être fermé et nettoyé pour respecter les Premières Nations de Pictou Landing et leurs terres. Je sais aussi qu'il y a beaucoup d'avantages à avoir 300 emplois bien rémunérés à Pictou et à soutenir des milliers d'autres en Nouvelle-Écosse, particulièrement dans les collectivités rurales.

La Loi sur l'environnement de la Nouvelle-Écosse est reconnue comme une loi essentielle conçue pour protéger notre environnement commun et guider notre développement économique. La Loi énonce à juste titre son objet au moyen d'un ensemble de principes de développement durable qui devraient guider son application, notamment :

-----> Le lien entre les questions économiques et environnementales, en reconnaissant que la prospérité économique à long terme dépend d'une saine gestion environnementale et qu'une protection efficace de l'environnement dépend d'une économie forte.

Dans cette situation, la science devrait déterminer la meilleure voie à suivre. La Nouvelle-Écosse, tout comme le reste du Canada, possède l'une des normes mondiales les plus élevées en matière de gérance environnementale dans le secteur forestier.

Le travail du gouvernement et de chaque personne que nous élisons pour nous représenter au gouvernement consiste à trouver la meilleure voie à suivre lorsqu'il y a de nombreux intérêts concurrents et parfois opposés. Les collectivités d'un bout à l'autre du Canada parviennent à trouver un juste équilibre où de bons emplois dans les usines coexistent avec une industrie de la pêche et des collectivités prospères.

Nous pouvons et nous devons trouver cet équilibre pour Pictou. Il y a beaucoup en jeu. Des emplois. L'environnement et le respect des Premières Nations. Nous pouvons et nous devons trouver une solution qui soutient les trois.

Merci.

Signé par :

@unifor.org)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:54:04 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Our whole household income relies on Northern Pulp, mine as a direct employee and my husband as well who works as a harvester operator for one of Northern Pulp's forestry contractors! This whole process has been so stressful and has caused us to not make any unnecessary purchases due to all this uncertainty!

Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:54:29 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@eastlink.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:54:38 PM

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@gmail.com)

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To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 4:58:12 PM

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Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:10:28 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

I Support Northern Pulp and an extension to the closing of Boat Harbour to allow for sufficient time to complete the New Effluent Plant. Northern Pulp is and has been one of the largest Employer's of Construction Workers in N.S. for 54 years .

Signed by:
@ns.sympatico.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:14:51 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@yahoo.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:15:03 PM

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Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:18:32 PM

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Thank you.

Signed by:

@unifor506.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:22:54 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:27:26 PM

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Thank you.

Signed by:
@hotmail.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Re: Northern Pulp Replacement Effluent Treatment Facility Project
Date: March 6, 2019 5:31:15 PM

March 6th, 2019

To whom it may concern

I am writing you to voice my *strong opposition of Northern Pulp's proposed on-site activated sludge treatment system*, which will pump millions of litres of hot toxic pulp daily through 11.4km of pipe across sensitive watersheds, directly out of Caribou Harbour, one of Nova Scotia's key tourism entry points and into the Northumberland Strait, one of Nova Scotia's most important lobster and fishing/breeding grounds.

As a cottage owner in Pictou County for over 20 years I am being asked to trust that the research has been exhaustive and thorough and that I have nothing to worry about based on a company with a dismal track record and an environmental assessment report that reports there will be no residual effect on the environment...whatsoever, in any scenario!

Let me start by saying that I find it unfathomable that Dillon Consultings' 'executive summary' of the Environmental Assessment report developed on behalf of Northern Pulp, indicates that not one single item within the submission would have any significant 'Residual Environmental Effect Predicted'. Not one out of 18 areas affected (including marine habitat, ground water, wildlife, plant life...etc) will have any residual effect; including no effect during construction, no effect during ongoing operation, no effect during ongoing maintenance, no effect during accidents, no affect during malfunctions, no affect during unplanned events! How can this even be possible?

Not to mention the amount of fresh water and forests consumed daily to feed the mills ongoing operations, or the air pollution that we have all been living with which becomes literally unbearable depending on which way the wind blows and whether the mill is in its '130% operational efficiency' mode!

Here is an additional part that causes me significant concern. What exactly will be coming out of the pipe and dumping into the Northumberland Strait? How can we possibly know, when they don't even know. The Dillon EA report referred to above has the following statement:

'At this time, effluent chemistry characteristics including the specific substances present in the treated effluent and their anticipated concentrations will not be known with certainty until the project is operational'

Clearly additional information is required before any decisions can be made on Northern Pulp's proposal. Why are we not insisting that this should either be a closed loop system or nothing at all. Give Pictou County a chance to thrive with clean air and clean water.

The County and all of its residents deserve that much!

Yours respectively,

Cottage Owner,

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:32:13 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

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@hotmail.com)

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Thank you.

Signed by:
@hotmail.com)

From: @live.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 5:43:31 PM

Project: replacement_effluent_treatment_facility_project Comments: I live on Caribou Island and do not want a pipe from northern pulp going out in the Strait. This would be close to my home. Should be done on site! Name: Email: @live.ca Address: Municipality:

Privacy-Statement: agree x: 71 y: 34

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 5:49:10 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 6:10:07 PM

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@hotmail.com)

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To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 6:32:17 PM

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Signed by: _____
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 6:36:08 PM

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Signed by:

@hotmail.com)

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To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 6:41:56 PM

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Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 6:42:04 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by: @nb.sympatico.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 7:03:27 PM

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Signed by:
@me.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 7:12:17 PM

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@mac.com

Signed by:

@mac.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 7:14:21 PM

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Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 7:20:02 PM

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Solidarity from 222

Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 7:48:49 PM

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From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 7:57:34 PM

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Signed by:
@unifor.org)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 8:13:20 PM

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Thank you.

Signed by:

@gmail.com)

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 8:17:22 PM

Project: replacement_effluent_treatment_facility_project Comments: We are writing to express our opposition to Northern Pulp's Proposed Replacement Effluent Treatment Facility Project as we feel it will result in significant adverse effects to the environment. Although we oppose the continued environmental pollution the mill has caused to the air, land and water as well as the on-going degradation of our forests within the province, for the purpose of this letter we will concentrate primarily on the effluent discharge into the Northumberland Strait in relation to the proposed Effluent Treatment Facility ETF. Our family have been property owners on Caribou Island for over 40 years, close in proximity to where the proposed effluent discharge outlet will be located. We have the utmost concern as to how this proposal will not only affect the environment, but the fishery, tourism, recreation and the general health and well-being of residents in Pictou county and beyond. Perhaps the biggest objection to the argument the Northern Pulp Nova Scotia NPNS proposal makes for the acceptance of the ETF and the discharge of effluent into the Northumberland Strait, is the lack of an objective, transparent, and unbiased opinion. This is no more evident than the fact that NSPC is the client of Stantec who has prepared the study. This as well as the limitations put upon the consultant are brought to light in the Sign-off Sheet of Appendix E1 which states: "This document entitled Addendum Receiving Water Study for Northern Pulp Effluent Treatment Facility Replacement Project" Additional Outfall Location CH-B, Caribou Point, Nova Scotia was prepared by Stantec Consulting Ltd. "Stantec" for the account of Northern Pulp Nova Scotia Corporation the "Client". The material in it reflects Stantec's professional judgement in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and Client. As we have no real knowledge of the scope, schedule and other limitations in the contract between Stantec and NPNS, we cannot know if this assessment is truly unbiased, and given the terms as stated above, could not be perceived as being independent. Likewise, the "schedule" as stated in the above, in itself questions if there was appropriate time to conduct a thorough enough research and analysis. We feel that much of the analysis is based on assumptions and models that we would not truly know if correct until this proposal was implemented, and at that point it would be too late should it be discovered that any of the key assumptions don't hold true. Therefore, we feel that much of key information as written in Northern Pulp's proposal is potentially flawed and requires further examination and scientific assessment by an independent third party. Table E.1.1-1: Summary of the Significance of Project-Related Residual Environmental Effects found in the Executive Summary, Pg. xxxiv, of The Northern Pulp Nova Scotia Effluent Treatment Facility Environmental Assessment Registration Document states within all of the Valued Environmental Component Vac categories that there was "No Significant Residual Environmental Effect Predicted NS". This includes such wide ranging environmental categories as Wetlands, Marine Mammals, Sea Turtles, and Marine Birds, Marine Fish and Fish Habitat, Harbour Physical Environment, Water Quality and Sediment Quality, to name only a few. However throughout the submission it is stated that the outcomes are predicted, so it is clear that results are best guesses and far from certainties. We do not feel that this assessment can be a true reflection of the potential damage to each of the VAC's based on the assumptions. It has been proven time and again that when it relates to the environment, assumptions are often misplaced. Examples of such assumptions can be found within the footnotes of the above noted table: "Water quality has been assessed through modelling of the treated effluent discharge. Through the analysis it has been

determined that under "worse case" conditions water quality at the end of the mixing zone for the three-port diffuser will reach ambient conditions within less than 2 m from the diffuser in terms of total nitrogen, total phosphorous, TSS, DO, pH, and salinity. Colour will return to baseline conditions within 5 m of the diffuser. Temperature will be within 0.1 °C of background at the end of the 100-m mixing zone. The key term to consider in the above statements is "Water quality has been assessed through modelling of the treated effluent discharge." It is not a certainty that results in actual conditions which are harsh and unpredictable will be the same as modelling that has taken place. Due to the importance of this, it again illustrates that modelling, testing and data needs to be completed by an independent, third party source. Likewise, in our eyes, it defies logic that "water quality at the end of the mixing zone for the three-port diffuser will reach ambient conditions within less than 2 m from the diffuser in terms of total nitrogen, total phosphorous, TSS, DO, pH, and salinity. Colour will return to baseline conditions within 5 m of the diffuser. Temperature will be within 0.1 °C of background at the end of the 100-m mixing zone." With effluent discharge at a rate of 62,000 to 85,000 litres per day, the mere volume of effluent flowing through the end of diffusers would result in the effluent being pushed out with such force that reaching ambient conditions a mere 2 m of the discharge point is questionable. The consecutive statement that "colour will return to baseline conditions within 5 m of the diffuser" appears to discredit the previous statement. If it takes 5 m for the colour to return to baseline conditions, would it not be likely that there must be chemicals within the effluent after 2 m of discharge? It is also stated within the Executive Summary, pg. xxxiii, par. 3, that "it is anticipated that the effluent plume will not be visible when it reaches the water's surface." It is clearly stated that it is anticipated, not known. Should a plume of any type be visible, it will have direct and lasting effects on our tourism industry as the Caribou - Wood Islands ferry to PE Island will pass directly by the discharge point. This is an example of only one direct consequence and does not speak to the many others including the fishery, recreation usage, environmental effects and general reputation of the province. Again, assumptions simply is not strong enough when an issue as important as this is at stake. Furthermore, as stated in on Pg. 21, Section 3.0 Regulatory Environment, Disposal at Sea DAS: "Detailed design has not been completed for the construction of the marine outfall and pipeline. Underwater geotechnical investigations and underwater habitat surveys are planned to inform pipeline routing and construction methodology." Seeing as this has not been completed, it would appear to be impossible to accurately determine what the water quality or plume distance will actually be from the discharge point. Further footnotes within Table E.1.1-1: Summary of the Significance of Project-Related Residual Environmental table state: "An update of NPNS air dispersion modelling was undertaken. The facility is expected to be in compliance with the provincial and federal air quality criteria for both existing and future conditions with the new ETF operational. Follow up and monitoring using Northern Pulp's current regulated source emission testing program will verify the environmental effects predictions." The blaring question in the above statement is who will be doing the monitoring of emission testing? As has been historically proven NPNS nor the government can be trusted to monitor or truthfully report test results within a timely manner. Again, the term "is expected to be in compliance" is used. This is not a certainty so the legacy of NPNS polluting our air beyond acceptable levels will simply be compounded. Additional footnotes of the above noted table also state: "It is not predicted that the installation of the pipeline will result in long term serious harm to fish or fish habitat." . Again, the key term to consider in the above statement is "It is not predicted." This is far from a certainty and the repercussions of this assumption will be devastating and long-term to not only the environment but the entire economy of the province. Finally, the same footnotes of the above noted table also state: "Environmental Effects Monitoring EEM and a Follow Up and

Monitoring Plan, including toxicity testing of treated effluent and water quality sampling, will be completed to monitor the potential effects of the effluent discharge. In addition, NPNS has had a Toxicity Prevention and Remediation Plan in place for many years which provides a structured approach for addressing treated effluent toxicity problems, should they occur. It would be irresponsible and unethical for NPNS to be the sole Stewart in this vital role, that of gatherer and retainer of this information and in turn deciding when Remediation Plans would be implemented. Again, this would need to be overseen by an independent third party with total transparency. Unfortunately, the government has not proven that they have the best interests of their electorate's health in mind when such monitoring of air and effluent has needed to be maintained in the past, so another regulating body may have to do the monitoring. As noted on Pg. 46, Project Description, Section 5.2.2.10, Hazardous Material Use and Storage, the effluent will include the following chemicals: urea, phosphorus, sodium hydroxide, sulfuric acid and an anti-foam agent to support its process. These are not chemicals that we wish to be in the waters where we swim, fish and boat in. Nowhere in the document does it discuss the very real possibility of the effluent causing hypoxic conditions within the waters of the Northumberland Strait. Nor does it appear to discuss the effects of warmer effluent entering sensitive ecosystems other than to state the distance it will take for the water to reach an ambient temperature or the on-going challenges this will create with climate change. On pg. 32, Section 4, Alternatives Considered for Conveyance of Treated Effluent, Table 4.2-4: Alternatives Considered for Final Discharge Location or Method, states that Pictou Harbour is unacceptable as a final discharge location as: "Preliminary modelling indicated that Pictou Harbour has limited mixing with the Northumberland Strait" water in Pictou Harbour tends to stay within the Harbour. Though treated, effluent would therefore result in the accumulation and increasing concentration of residual contaminants contained in the treated effluent, over time. Given the discharge rate, effluent contaminant accumulation could result in negative effects on the Harbour over time. As stated above, there is clearly an admission that effluent contaminates create negative effects over time. It goes on to state that discharging effluent into Boat Harbour is also not acceptable as: "This option would see the release of treated effluent continue from the same location as the BHETF presently discharges. This would mean that, even if the discharge characteristics remain the same or improve, there would be no appreciable changes to existing conditions today in the local communities and in the Strait. The aim must be to improve the current conditions, not have no appreciable changes. Yet this proposal's response is to continue to dump effluent into the Strait, just at a different location. The toxins within the effluent remain, despite what we are being told of the disbursement rate. As evidenced by the above noted table, it would appear that the Caribou Harbour location for the discharge point of the effluent is viewed as the best of the four locations that were considered for discharge into the Northumberland Strait. However, this does not go to reason that this means of effluent treatment and disposal is safe or acceptable to the environment, the fishery, tourism or the well-being of the people who live, work and recreate within the Strait and surrounding area. It can only be comprehended that out of four really bad options, this is the best of the worst, which simply isn't acceptable. Appendix E1, pg. 17, par. 4, states: "Statistical analysis of flow directions at CH-B revealed that 85 of the time flow is either in the southeast or northwest directions." Appendix E1, Pg. 27, par 2, Section 4.0 Conclusions, states: "The cumulative effects by the end of the one-month assessment period" There is an admission that not all of the effluent will be disbursed by off-shore currents, yet there appears to be no measurement of what the total concentration of residual contaminants that enter Caribou Harbour will be. The above statement also shows that such testing was only done over a very short period, one month, so any actual long-term results are not taken into account. Pictou Harbour is clearly stated as being an unacceptable discharge location, yet despite this,

Caribou Harbour which is of similar in size, is very shallow and has a very diverse ecosystem, is being considered as an acceptable discharge location. Based on over 40 years of personal experience, tides and currents running up Caribou Harbour can be strong and extreme. It is therefore not our belief that 85 of the currents will be off-shore and result in the disbursement of effluent further out into the Strait. Regardless of the volume and frequency of the prevailing currents, effluent will regularly enter into Caribou Harbour with each tide and whenever the currents are running inland. Effluent and the toxins within will not be effectively disbursed due to the size, depth and confinement of the harbour. Eutrophic conditions have noticeably increased within Caribou Harbour in recent years. The nutrient-rich effluent from the ETF will simply compound this problem and put the entire Northumberland Strait at risk which could have devastating effects on the fishery. Climate change, with resulting increasing water temperatures will simply exacerbate this issue. At the end of Pictou Harbour is the Waterside Beach which is enjoyed by both local folks and tourists from all over the world. Behind the beach, and facing the harbour is a wetland which is fed by no more than a few small culverts underneath the causeway entering Caribou Island. Drainage of these wetlands is therefore limited. It is likely, therefore, that toxins from the effluent would accumulate within this as well as the many other wetlands within the harbour. In the case of Waterside, there could potentially be higher than acceptable toxins leaching into a very popular and highly used recreation area. In relation to the fishery, Appendix R, Scientific Literature BKME Effects on Lobster, Pg. 1 A Summary of the Scientific Literature Related to the Effect of Bleached Kraft Mill Effluent on the American Lobster *Homarus americanus* states: "Note: This report uses the Stantec Preliminary Receiving Water Study for Northern Pulp Effluent Treatment Plant Replacement, Pictou Harbour, Nova Scotia report Stantec, 2017 and the Stantec Addendum Receiving Water Study for Northern Pulp Effluent Treatment Facility Replacement Project-Additional Outfall Location CH-B, Caribou Point, Nova Scotia Stantec, 2018 as the basis for determining the location, composition and behaviour of the released treated BKME. It is important to note that the values and distances in the Stantec reports Stantec 2017, Stantec 2018 have been generated through modelling and not through onsite testing. Therefore, if modeling predictions prove to be inaccurate, then the predicted impact on lobsters as described in this report are invalid." Therefore, the information as stated in the findings of this report all hinge on Stantec's modelling reflecting real world conditions, which cannot be validated as "Detailed design has not been completed for the construction of the marine outfall and pipeline." Pg. 21, Section 3.0 Regulatory Environment, Disposal at Sea DAS As stated on pg. 11 of the above Appendix under the heading "Recommended Scientific Research" it states: "Studies to more accurately assess the potential for impact to adult lobsters including lethality, behavior, and sublethal impacts are recommended to be carried out with current treated BKME." "Completing studies of lobster larvae with today's treated BKME would allow for confirmation and better understanding of potential lethal and sublethal effects. Therefore, the previous article on the Effect of Bleached Kraft Mill Effluent on the American Lobster cannot be verified as being accurate until studies are completed using BKME from the new ETF, making the study irrelevant. Finally, in addition to what we feel are questionable and potentially bias conclusions of the report, there are the following key points that we feel need to be considered more deeply before a final decision can be made: " A fully independent, thorough, scientific and environmental assessment of the potential ramifications of the project needs to be completed, taking into account the impending federal regulations that will soon be coming into effect. This review should be allowed to take as much time as is necessary. " The 30 day timeline set out for the public to fully evaluate and respond to this proposal and future environmental assessments is much too short and needs to be extended. Likewise, there is not possibly enough time for the Minister to review all concerns and evidence from the public so as to make such an important decision that could potentially affect

generations to come. A decision to allow Northern Pulp to proceed with their proposal could have deep and lasting adverse effects to the local fishery, tourism, recreation and entire economy not only of Nova Scotia, but that of the entire Northumberland Strait including New Brunswick and Prince Edward Island as well. If the fishery were damaged as a result of Northern Pulp's proposal, the province may open themselves up to potential lawsuits from not only the local fishing and tourism industry, but other provinces as well. Tourism, which is vital to the economy of the area will undoubtedly take a serious blow, as a big reason those that come to visit the area are for the beaches and perceived clean waters within the area. If there is damage to the fishery, potentially no one along the Strait could make a living from the sea. In the last few years, municipal, provincial and the federal governments have all invested heavily to clean up municipal sewage from being dumped directly into the oceans, harbours and waterways of Nova Scotia communities. Yet here we are considering allowing a corporate entity to dump potentially worse effluent into one of the most ecologically diverse and sensitive waters in our province. By allowing this project to move ahead, it will have a direct and long-lasting effect as to how Nova Scotia is viewed within the world. Do we wish to be seen as a banana republic or do we wish to diversify our economy and ensure that we leave as clean and preserved an environment as possible to our children and future generations? The potential loss of NPNS and its effects will be long gone by the time our children are adults. The potential devastating environment effects of allowing the proposed ETF and discharge of effluent into the Northumberland Strait could last for generations and beyond. Our oceans cannot continue to be dumping grounds. Is the risk worth the potential irreversible damage to the environment, economy, and health of the people of Nova Scotia and beyond? We resolutely feel that it is not, and in the interests of all Nova Scotians, we feel it is your duty and responsibility not to allow this project to move forward. REQUEST: For this reason, we are requesting that the Minister orders an Environmental Assessment Report. Respectfully submitted,

Name: _____ *Please acknowledge receipt of these comments.
Email: _____ @eastlink.ca Address: _____

Privacy-Statement: agree x: 66 y: 28

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 8:18:02 PM

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Signed by: _____
@hotmail.com)

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To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 8:19:04 PM

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@unifor.org)

From:
To: [Environment Assessment Web Account](#)
Subject: Boat Harbour
Date: March 6, 2019 8:50:54 PM

They've had their chance to change. 5 years is more than enough time to make a plan. Time to get rid of them if they don't comply. It's a horrible decision to have to make, agreed, but surely there are more life-supporting ways to live in our beautiful Province that support and glorify what we've been given. Let the chips fall where they may!!!
Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulps effluent treatment EA - concerned citizens /
Date: March 6, 2019 9:06:00 PM

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442

Email: EA@novascotia.ca

Dear Ms. Miller:

**Re: Northern Pulp Nova Scotia - Environmental Assessment
Registration Document- Replacement Effluent Treatment
Facility**

The Northern Pulp Nova Scotia Replacement Effluent treatment Facility has many concerns for me and my spouse. As residence of Pictou County, Nova Scotia this issues hits us right in our backyard. I myself am a second generation fishermen and father of two - a three year old and a one month old new born.

Besids my knowledge as a fishermen I am also a Red Seal Tradesmen trained as an Industrial Mechanic (Millwright) which gives me more insight into the industrial workings of a pulp mill.

In Northern Pulp's EA submission, there are many issues that are of great concern for me that need more review and information to insure the heath and safety for both the people of Nova Scotia and the Northumberland Strait to which we fish and share with surrounding Provinces. I am asking that you, as the Minister for Nova Scotia Environment, order an environmental assessment report of Northern Pulp's proposed effluent treatment facility for the following reasons.

1. Protection of Fish and Fish Habitat:

Since I am a lobster licence holder, the new treatment facility outfall is a major concern - what affects will it have on lobsters and their habitat as well as the lobsters reproduction system which includes their larvae. This information is so important because it is what will allow the survival and future sustainability of our industry. In

Appendix R of Northern Pulp's EA is where you find the lobster study information which is very limited. Here in the executive summary it states *"It is important to note that the values and distances in the Stantec reports (Stantec 2017, Stantec 2018) have been generated through modelling and not through onsite testing. Therefore, if modeling predictions prove to be inaccurate, then the predicted impact on lobsters as described in this report are invalid.*

This statement here concerns me as to how valid the receiving waters study is as well the lobster study. This area needs much much more information and in-depth studying to ensure our lobster and larvae are not harmed from the effluent leaving the outfall location.

2. Scallop Buffer Zone:

While on the topic of lobster, I would like to bring to your attention a link to the DFO website that describes our scallop buffer zone. Here is how the buffer zone reads as to the conditions for the commercial fishers licence set out by DFO and Enforced by DFO fishers officers as to the fisheries act and is found as Scallop condition 7: *No person shall fish for scallops in that portion of scallop fishing area 24 in those waters adjacent to the Province of Nova Scotia within one [1] nautical mile from the nearest point of land in the counties of Cumberland, Colchester, Pictou, including Pictou Island in the Northumberland Strait, and Antigonish.*

With this pointed out I would then like to refer to Northern Pulps EA, registration document- section 8, page 382 figure [8.12-10](#) and then the wording on page 384 where they state the outfall location is outside of this buffer zone. If Northern pulp worked with DFO more, they would have been shown and explained that their figure in there EA was incorrect and that the scallop buffer zone is one nautical mile from any point of land. This means their outfall is located inside a marine refuge area which is intended to protect the juvenile American lobster <http://www.dfo-mpo.gc.ca/oceans/oeabcm-amcepz/refuges/sfa-zpp-eng.html>.

Here are other limitations within scallop buffer zones that are set out by DFO.

Prohibitions:

- Scallop dragging.

- No other human activities that take place in this area are incompatible with the conservation of the ecological components of interest.

3. Total Suspended Solids

- The outfall location is located just off the Caribou Harbour channel and the accumulation affects from the suspended solids in the effluent is another huge concern. One of the first meeting with Northern Pulp and the fishers was held at the Pictou County Wellness Center in early December of 2018. At this meeting KSH solutions stated when asked the following question "Where does the heavy solids go?", his response was, " Away". Well on page 84 of the EA document, Table 5.6-1 the total suspended solids (TSS) is 48mg/L . When you do the long hand and work that out for their daily water usage of 85 million litres a day that is just over 4 tons of solids sent out into the Northumberland Strait daily. This is unacceptable. Four ton of solids won't just go away as KSH stated. The accumulative affect and build up is unknown and needs to be addressed.

4. Shell Fish Closure Zone:

Also a concern not addressed in Northern Pulp's EA is what will or what is the probability of a shell fish closure zone around the outfall. Will it be based on depth and volume of water affected? Will it be left up to DFO, not a Northern Pulp issue, but only to be a issue and concern to the fishermen? The area of the proposed outfall is one of the last remaining herring school breeding/ spawning ground for which I fish during the fall herring season 16F. As fishers we have drastically reduced our quota to continue to protect and look after the herring stocks for generations to come. As DFO knows the herring stocks are in very poor shape and as a precautionary measure, have cut quota in hope to rebound the stocks.

What is this outfall going to do to these herring spawning grounds? This is just one more reason that more in-depth studies need to be done to these very critical species.

These are just a few of my concerns as a fisher, but working full-time this winter as a Millwright and with a new born in the house, having time to study this EA in such a short time has been challenging.

5. Power Boiler

Now my next few points of concern are with the burning of the sludge and what will be taken out of the new effluent treatment system to be burnt in there power boiler and sent out into the air - the

power boiler that does not have a precipitator! This is the same power boiler that failed emissions tests in 2015, 2016 and 2017. As stated in a news article in the The NG News, dated Jan 22 2018, the reason for the failure of the emission limits was because of what was burned in it -

"These included changes to what went into the boiler, and how it was burned, which led to more efficient burning of that material and fewer particles leaving the boiler.

One significant improvement was to reduce the amount of sawdust and shavings, and to increase the size of the bark put into the power boiler. That had a significant improvement on performance"

If this boiler is what is going to be burning the sludge it concerns me that this was not addressed fully. How they will get there mixture right to pass any emission limits test? How will the particular mater be taken out of the air? I feel Nova Scotia Environment needs more information on this matter to insure public heath is not at risk.

6. Plant Drainage

Now my finial point that I'm going to mention and touch on is an in Plant issue that deals with there drainage and cleaning of their systems like the digester, pumps, and their pipe lines within the plant that are full of green liquor, brown liquor, white liquor , black liquor and any other chemical substances that are used in the pulp making process. During shut-down periods, these substances get flushed with acid for cleaning purposes. During these shut-downs or during emergency break-downs within the plant, at any given time, these substances are flushed down a drain and out into Boat Harbour. Any process interruption is drained off and sent down a drain out into Boat Harbour as well.

No where in Northern Pulp's EA does it mention a process for kraft interruption or their cleaning processes for the items mentioned above. The EA does not mention how the new system will handle these chemicals in their raw formate or how the microorganisms that are used in the AST system will interact with these chemicals. This is a major concern because these types of incidents happen far too often in this plant and more information should be addresses to what will the affects be on the AST system. Any slight mix up in their process will affect there AST system which then affects the outfall discharge.

I want to thank you for your time in reading my submission and hope that you take my concerns as serious as I do for the heath and well being of the Northumberland Strait. That all species and their larvae are protected and studied to ensure they will be around for years to come. If fishermen are held to respect Marine Refugee Areas to insure safety of the juvenile lobster, so should Northern Pulp. There

should be no risk put on any species in the Northumberland Strait that could cause adverse affects to a commercial fisheries and to human recreational enjoyment. Let's get this assessment done right and protect the water and the air from harm that can not be reversed. I look forward to hearing from you with regards to these issues.

Thank you

Sincerely:

@hotmail.com

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Effluent Treatment Plant
Date: March 6, 2019 9:13:57 PM

Good day,

I believe the gouvernement of Nova Scotia would be grossly negligent given the planets' climate crisis to consider allowing any chemical pulping of any product to continue in a way that is harmful to the environment.

The pulp mill has been a boil to Pictou since it's inception. Though it bears with it a few positions, the pollution it produces has too negative effect on it's residents and it's wildlife. The folks that work there could be re-trained to produce an organic sustainable product, that doesn't require the pollution of the straight that is the livelihood of so many others, not to mention a tourist attraction for both NS and PEI.

I implore you to only consider the health of your citizens and the future of your planet when you consider the next life of this facility.

Respectfully,

Citizen of Canada

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 9:19:35 PM

Project: replacement_effluent_treatment_facility_project Comments: Lets make this work
!Too many jobs at stake. Name: Email:

: Privacy-Statement: agree

x: 68 y: 22

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:28:12 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

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Thank you.

Signed by:

@hotmail.com)

From: @northernpulp.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 9:29:18 PM

Project: replacement_effluent_treatment_facility_project Comments: The replacement effluent treatment facility at Northern Pulp has received a fair bit of media attention during the development of the project. I am writing to urge anyone involved in the review of the project to remember that the review must be based of science and regulations, and not emotional decisions. The project is designed to meet or exceed all current requirements for pulp and paper effluent in Canada, regulations which every pulp mill operating in the country must meet. The effluent will no doubt have an impact on a very limited area of the straight, however any effluent from any treatment facility, be it a municipal facility, or an industrial facility will have an impact on its receiving waters. The design of the treatment facility and pipe is such to minimize this impact. Again, please follow the science, and regulation when evaluating this project. Name: Email:

Privacy-Statement: agree x: 81 y: 21

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:34:17 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:35:26 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@hotmail.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Waste Proposal
Date: March 6, 2019 9:37:10 PM

Hello,

My name is Nova Socian born and raised in Halifax. I am sending this email to express my concerns over Northern Pulp and their new waste proposal.

Every year I patiently wait for spring time to enjoy one of the things I love most about our province; the Northumberland Strait. From The beautiful beaches, to the only rivers left in our province that are home to the last of the wild Atlantic Salmon.. To think that Northern Pulp and their proposal to pipe their effluent into the Strait is even being considered, disappoints me deeply. The last 50 years we cannot erase..but it is time for change.

I have always planned on staying in my home province and raising a family here. I am afraid of losing the opportunity to show my future children what our beautiful province has to offer. I am afraid of the increasing and alarming risks to human life in the surrounding area of Pictou County and beyond.

Thank you for taking the time to listen to my concerns, and I hope for future Nova Scotians that you will do all you can to put forward a provincial and federal assessment.

Thank you,

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:40:49 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@icloud.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:43:29 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Signed by:

unifor.org)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:47:16 PM

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Thank you.

Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:48:31 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@seasidehighspeed.com)

From:
To: [Environment Assessment Web Account](#)
Subject: from re. EA Northern Pulp
Date: March 6, 2019 9:52:41 PM

Environmental Assessment Branch
Nova Scotia Environment
PO Box 442
Halifax, Nova Scotia
B3J2P8 Christina McKay 1104 Belmont on the Arm
Halifax, N.S.
B3H 1J3

To the Minister of the Environment,

I am writing regarding Northern Pulp's proposal to pipe effluent from their plant at Abercrombie out into the Northumberland Strait through Caribou Harbour.

My family have owned cottages at Moodie Cove for over one hundred years. We share this cove, and the beautiful Lighthouse Beach, with the Pictou Landing First Nation. We, like the PLFN, have suffered from the air emissions and water pollution coming from Northern Pulp and Boat Harbour for over 50 years. As successive generations of children have come to play at the beach, we have noted, even in our small cove, the effects of eutrophication and warming in the Strait. There is less biodiversity: the tidal pools are empty of creatures. The mud is black and oozing at low tide, and the shellfish are dead near the tide lines. There are fewer fish. It is clear that Northern Pulp, and its predecessors, Scott Paper and Kimberley Clark, have poisoned this place, its people, and all its living creatures. It is a beautiful place, but it is blighted.

I am writing to you to tell you that the proposed pipeline will deliver the same destruction only a few kilometres down the shoreline. The whole Strait is under threat from Northern Pulp's plans to spew its effluent into prime fishing grounds and a vulnerable ecosystem.

In this letter, I will outline some of my many grave concerns about Northern Pulp's plan. These include:

- 1. The actual safety and maintenance of any pipeline, both over land and underwater.**
- 2. The failure to take ice scour into account in the current pipe models**
- 3. The effects of high effluent temperatures on an already-warming Strait. There is a lack of climate-change modeling to account for higher**

ocean temperatures.

4. The lack of current, peer-reviewed studies on the effects on human health from both this proposed pipe and the burning of sludge and its contribution to toxic air emissions

6. The lack of specific detailed information about the content of this future effluent to be piped into the Strait.

7. The lack of any current, peer-reviewed studies to demonstrate the lack of toxic effects from the effluent on lobsters or other fish in the Strait and the fact that this proposal claims to meet current regulations when in reality, the regulations themselves are outdated and weak.

8. The fact that our province, in making plans for our environmental future, needs to apply the precautionary principle.

The fact is that to our knowledge, Northern Pulp's current effluent pipe has leaked at least twice since 2014. It was this first leak, and the spillage of over 47 million litres of effluent onto the sacred burial grounds of the PLFN that precipitated the signing of the Boat Harbour Act. Northern Pulp, despite previous legislation and regulations that should have forced them to monitor their equipment with the utmost diligence and meticulousness, failed to discover their own failure. And even more stringent requirements four years later did not produce any better effects: a neighbour, walking their dog, discovered that the current pipeline had leaked yet again.

Surprisingly, no official government reports are available to let the public know the amount, and the damage resulting from, October 2018's effluent spill. Should Northern Pulp carry out its plan to place an even more contentious and unwanted pipe along the #106 and out into Caribou Harbour, I fear that such a pipe would not only be subject to the poor maintenance record of its own corporation, but also to potential sabotage from angry citizens. How safe is a pipe, either overland or underwater, when so many cannot countenance its presence in their community and over their watershed?

The real dangers of ice in the shallow waters of the Strait also pose a significant threat to an underwater pipe. According to a report from the Canadian Coast Guard on Ice Climatology and Environmental Conditions (CCG, 2012), ice rafting is a frequent occurrence. In this case, huge sheets of ice can drift or be blown up to override each other and form stacks along the shoreline. In addition, ice scouring along the shallow bottom poses a risk to pipelines, outfalls, diffusers and submarine cables.

There is no section of this report that addresses eventual ice scour or ice rafting and the definite damage it would do to a pipe spewing effluent in to the Strait at shallow depths.

The current EA proposal estimates that the temperature of the effluent exiting into the Strait via the pipe could be up to 37 degrees in the summer and 23 degrees in the winter. The current modelling accounts for an area of dispersal, and estimates that the temperature changes could be negligible in a wider area beyond the pipe. However, recent media reports this week brought forth research that demonstrates that there are marine heatwaves sweeping through the world's oceans as a result of rapidly accelerating climate change.

According to an article in The Guardian from March 4, 2019, "Global warming is gradually increasing the average temperature of the oceans, but the new research is the first systematic global analysis of ocean heatwaves, when temperatures reach extremes for five days or more." In addition, the article states that "The scientists compared the areas where heatwaves have increased most with those areas harbouring rich biodiversity or species already near their temperature limit and those where additional stresses, such as pollution or overfishing, already occur. This revealed hotspots of harm from the north-east Atlantic to the Caribbean to the western Pacific." Ocean systems are increasingly battered by multiple stressors.

The double-barreled punch of a high nutrient load along with higher temperatures will be absolutely devastating for the Strait. Boat Harbour currently buffers these stressors by lowering the temperature of the pollutants and removing a great deal of the solid biomass. With current ocean research demonstrating that our waters cannot adjust, cannot adapt and are indeed suffering much like our forests are with the effects of climate change, how can we justify adding up to 90 million litres of effluent per day into an already-stressed ecosystem?

Another grave concern is the fact that as this EA is a class 1 proposal, limited information is provided about the plan to collect and burn the sludge that will accumulate in the proposed EFT. No Human Health Risk Assessment has been carried out to ascertain additional dangers to human health should the sludge be burned in the stacks belonging to NP. These are stacks which have repeatedly failed emissions testing regulations in previous years. As it seems, according to the EA, the actual content of this sludge is not entirely certain. How can we risk burning it and emitting it into the air breathed by tens of thousands?

According to the EA document Section 9-15, At this time, it is only possible to identify candidate COPCs [contaminants of potential concern] that may be evaluated should a HHRA [Human Health Risk Assessment] of the project be a regulatory requirement. This is due to the fact that chemical process engineering design work is continuing and there is presently uncertainty regarding the likely chemical composition and characterization of the marine treated effluent discharge (including the potential

concentrations of substances present in the effluent.” As I am to understand this, there is no current certainty about what the effluent will actually contain. Furthermore, according to page 489: “At this time, effluent chemistry characteristics (***including the specific substances present in treated effluent and their anticipated concentrations***) will not be known with certainty ***until the project is operational***”. In other words, we are to take this EA proposal at its word despite the fact that we don’t know what they will be burning in the stacks, or indeed, what exactly they will be spewing out into the Strait.

The proposed Northern Pulp pipe outfall location in Caribou Harbour is a critically important fishing and spawning ground for lobster, rock crab, herring, ground fish, and many other species. Current toxicity tests are based on a “kill test” scenario, where the number of trout left in a bucket of effluent determine how dangerous the effluent might be to the species affected. This is simply not good enough in 2019. The idea that NP’s effluent “passes regulations” is simply inadequate and hollow. Greg Egilsson, Chair of the Gulf NS Herring Federation and who fishes very close to the proposed pipe outlet, estimates that within a radius of just a few kilometres, there are 86 lobster fishermen, of whom 10 to 15 are First Nation, and more than 22,500 traps are set in the area (Halifax Examiner). The deep channel where they want to place the pipeline is crucial for lobster and herring larvae, and that herring spawning stock are already depleted.

In fact, according to the paper “Bleach Chlorine Mills and the Impacts on Marine Life” (Effluents from Pulp Mills Using Bleaching. Environment Canada 1991), “ Seventy-five percent of Canadian bleached pulp mills discharge effluents that are acutely lethal to fish, sometimes at concentrations as low as 3.2% effluent. A few individual chlorinated organic compounds in these effluents approach or surpass concentrations that cause mortalities in aquatic organisms ranging from algae to fish.” In other words, the “kill test” is absolutely inadequate, and more stringent regulations must be applied immediately, and this EA proposal should be required to submit to these, not simply the limp regulations they’ve “adhered” to so far.

The FOIPOP obtained by environmental lawyer Jamie Simpson (Ahern, Brendan “Environmental lawyer says correspondence inside Northern Pulp contradicts company claims to the public” The Chronicle Herald 28 Feb, 2019) contains correspondence within NP that indicates clearly that the mill itself knows that despite their claims to the contrary, the new ETF would be worse than the old facility because of the elimination of the Boat Harbour Basin. Boat Harbour achieves a “polishing” of the effluent and a removal of a substantial amount of solids. What is pumped out into the Strait through this new proposed pipe is not, in fact, “state of the art”: it is worse by far. Northern Pulp might be proposing a newer system, but the location is much riskier. Because of this, more toxins (though, as the report admits, still “unknown”) will

reach the Strait.

Finally, I beg you to scrutinize the EA proposal put forth by Northern Pulp with utmost care and concern. The same such care and concern were not given to the PLFN, who have endured fifty years of environmental racism with the appropriation of Boat Harbour and subsequent destruction of their air and aquatic environments.

Please be reminded that the Federal Government published a document entitled "A Framework for the Application of Precaution in Science-based Decision Making about Risk" [Privy Council Office (PCO), 2003]. This paper addresses the application of precaution in its various forms - "precaution", "the Precautionary Principle" or "the precautionary approach" - all of which have three basic components: the need for a decision; a risk of serious or irreversible harm; and a lack of full scientific certainty. This guiding document requires that precaution must preside over all decision phases. Precaution must be clearly linked to scientific analysis, and cannot be applied without an appropriate amount of assessment of scientific factors and consequent risks.

Simply the fact that this nearly 2,000 page EA proposal was dumped on the general public with less than 50 days to comment is in itself a cause for grave concern. How can external, peer-reviewed studies be mounted in such a short amount of time? How can the public find time, and expertise, needed to comment effectively?

The 1999 Canadian Environmental Protection Act entrenches the "precautionary principle" in its preamble, where it recognizes that the "Government of Canada is committed to implementing the precautionary principle. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." In addition, section 76.1 of CEPA 1999 specifically directs the Ministers to apply a weight-of-evidence approach and the precautionary principle when conducting and interpreting the results of assessments of existing substances. We do not even know for certain, based on the EA proposal at hand, what these "existing substances" are, or in what quantities they might exist.

The government's precautionary principle must supersede any social, ethical or even political or economic considerations. We can no longer afford to allow the economy to trump our fragile environment. We must, above all, apply caution first.

Please, do not approve this Environmental Assessment for Northern Pulp.

Sincerely,

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:52:55 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@hotmail.com)

NB

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 9:57:26 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@outlook.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 10:00:48 PM

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Thank you.

Signed by: _____
@hotmail.com)

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 10:01:38 PM

Project: replacement_effluent_treatment_facility_project Comments: this is not 1967 lets move forward we used to put motor oil on roads we dumped garbage in the east river Pictou just stopped dumping raw sewage in pictou harbour. the waters along Little Harbour are closed to shellfish harvesting because of high levels of e coli the lobster fishing along little harbor has never been better and the effluent is going into strait now . let the dept of environment due its job and review the proposal and make ther determination and both sides live with it. both industies need to survive and flourish so Pictou county can move forward and flourish. jobs lost with closing of Trentron works have not returned. jobs lost with closing of matitime steel have not returned. tourists turning away from Pictou county because of repots of peoples have to wear masks to breath are not doing anything for our economy. lets focus on the science not the negative fear mongers and fishers who work 2 months and draw ei the rest of the year. maybe this is someth ing the federal government needs to review and treat all Canadian workers the same our call center employees work for years and when the call centers close they get regular not special benefits Name: Email:

@gmail.com Address:

Privacy-Statement: agree x: 53 y: 24

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 10:14:45 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@live.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 10:22:51 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

I am a concerned/heavily taxed Northern Pulp employee. I need help for my tax money. I pay lots

Signed by:
@outlook.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 10:32:32 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@shae.ca)

From:
To: [Environment Assessment Web Account](#)
Subject: Comments on Northern Pulp Replacement Effluent Treatment Facility for Environmental Assessment
Date: March 6, 2019 10:32:35 PM

March 6, 2019

Dear Sir or Madame,

Re: Comments on Northern Pulp Replacement Effluent Treatment Facility

Please acknowledge receipt of this letter: e-mail: [@eastlink.ca](mailto:)

In August 2011 I moved to Pictou from Ontario outside of Ottawa. I am a retired . When moving to Pictou I was not concerned about the Mill since the province I had lived in had strict environmental enforcement and heavy fines, often 1 million dollars or more. It was a mistake for me to assume that Nova Scotia would be similar.

When the ETF project was first proposed I attended a Northern Pulp information open house. Since then, the pipe route has substantially changed. The first route was mostly underwater. The current plan is above land, underground and underwater. Due to the change in the route I had many more questions about the project. Northern Pulp should have held another open house so members of the public could get their questions answered about the new route. Therefore, there has not been adequate information provided to the public or adequate public consultation.

Furthermore, the Citizens' Committee for Northern Pulp is not accessible to the public as the company will not reveal who is on the committee. one of the founders of the face book group, Clean Up the Pictou County Mill, was refused this information from Northern Pulp more than once. When minutes of Citizen's Committee meetings are published there are no names, not even the name of the chair person. This is not accepted practice and highly unusual. A copy of minutes is attached in the appendix.

The main issue I will focus on is the pipe route going near the watershed for Pictou drinking water, the history of past pipe blow outs and leaks and the quality of the effluent. The later two can both have an effect on our drinking water. The second issue I will focus on is burning the sludge.

I am very concerned about the proximity of the pipe route to watersheds for Pictou drinking water. Section 9.1.2 page 493 of the RETF states:

As the current proposed pipeline route traverses a drinking water supply area, there is a potential that accidental releases from the effluent pipeline in this area (should they occur) could potentially impact potable water supplies.

In the section of the ETF document entitled executive summary page XXXV it states:

In summary, based on the results of this environmental assessment registration with planned mitigation and the implementation of best practices to avoid or minimize adverse environmental effects, the wastewater treatment facility projects effect on the environment during all phases is rated as not significant.

Northern Pulp can only estimate what the chemical composition will be for the effluent. They claim this information will be not be known for certain until the new facility is operational. Yet they tell us there will be no adverse environmental effects. By this time it will be too late. We are to believe them that everything will be fine. Their poor environmental record tells us otherwise, major leaks in the effluent pipe, numerous failed air quality tests and ash slurry spills. None of their antiquated equipment was replaced until your Department told them to. Please refer to the Appendix I which details Northern Pulp's environmental record at the end of these comments.

My concerns for drinking water for Pictou relates to future pipe breaks and pipe blow outs. There has been a history of several of these occurrences in the current pipe going to Boat Harbour. The leaks speak to lack of monitoring of the effluent pipe, as well as poor maintenance and lack of preventative measures. Northern Pulp states that leaks are normally not part of an environmental assessment. However, in view of the leaks that have occurred I want you to take this in to consideration.

It is not acceptable that the pipe go anywhere near the watershed for Pictou drinking water. The residents of Pictou will not allow this to happen. The town of Pictou cannot risk a leak damaging their drinking water supply. Northern Pulp will have to propose a new route to totally avoid this area.

Let us look at the monitoring system for leaks that Northern Pulp is required to have and how this system failed to detect the leak in October 2018 which is still under investigation by your department:

Section 7 of Northern Pulp's [Industrial Approval](#) states that:

- d) The Approval Holder shall monitor flow at Point A, the end of the effluent transmission pipe, on a continuous basis. This data shall be recorded daily and tabulated monthly*
- e) The Approval Holder shall operate and maintain real time flow monitoring equipment at the end of the effluent transmission pipeline which is designed to immediately notify the Approval Holder in the event of a total loss of flow or a reduction of flow below normal operating conditions*
- f) The Approval Holder shall immediately investigate any flow reduction or loss notification received from equipment outlined in Condition 7(e). These incidents, together with the reason for the loss or reduction of flow causing the alarm, shall be recorded and tracked monthly*
- g) The Approval Holder shall immediately notify the Department of a loss or reduction of flow which results or may result in a release of untreated effluent to the environment.*

According to their Industrial Approval Northern Pulp currently has to have a system to monitor the flow at the end of the pipe. None of the breaks or blow outs in the pipe were discovered by Northern Pulp. All were discovered by residents of Pictou Landing First Nation and Pictou Landing. In 2014 there was environmental damage done at Pictou Landing First Nation when the pipe blew out. The most recent effluent leak on October 21, 2018 was discovered by William Palmer and his wife when were out for a morning walk. For a Nov 6, 2018 article in the Halifax Examiner entitled *Containing Northern Pulp's Mess*, author, Joan Baxter spoke with Mr. and Mrs. William.Palmer who have lived near Indian Cross on Pictou Landing since 1985. Quoting Joan Baxter " as Palmer told me, he and his wife have discovered "all" of the leaks near Indian Cross Point — six of them — since they moved to the property there in 1985. The mill had been on annual shut down for a day when the leak was discovered on October 21, 2018 so it is still not known how much of the fluid spilled was pulp effluent or other chemicals used in maintenance."

If Northern Pulp installed a monitoring system, per their Industrial Approval, obviously the monitoring system did not work properly to alert the company of a leak. The leak in October 2018 was discovered _____ the day after Northern Pulp's annual shutdown. If the Northern Pulp monitoring system measures a drop in water pressure one system is not adequate. Perhaps cameras have to be used on land and under water cameras in the ocean. Once the project is operational the ETF filing states there will be monitoring but provides no further details. This is not good enough. A monitoring system to detect leaks needs to be detailed in their proposal as well as any other monitoring systems.

Section 9.1 Human Health page 489 of the ETF for an environmental assessment states:

At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentrations) will not be known with certainty until the project is operational.

In a CBC Halifax radio program on February 25, 2018 environmental lawyer _____ from Halifax spoke about information he obtained through the Freedom of Information Act. In an email between Northern Pulp's Technical manager and Dillon Consulting, written on Nov. 29, 2017, Manager " Effluent going in to the Northumberland Strait will be worse than today because of all the polishing going on in Boat Harbour. " During this radio program lawyer _____ further noted that the DOE told NP they have to specify toxins that will persist over time and this information has not been provided.

You cannot approve this project without knowing what the chemical composition of the effluent will be and the long term effects of toxins..

In 2014 when the old precipitator was not working properly, the air quality in Pictou was so bad I could not open my house windows for months. Some tourists who had reservations did not spend one night in Pictou (I volunteered at the Visitor Information Centre). In retrospect I should have worn a mask anytime I was outside. No community should have to live with such poor air quality.

Construction will have a negative effect on tourism which Pictou businesses depend on. There will be delays in traffic in Pictou by the first rotary coming in to town,(the newer second rotary is not shown on the map that Northern Pulp has filed with the pipe route) to and from the Ferry as well as delays in the Ferry to and from PEI. This is clearly stated in the document. I would like more detail on what they mean by delays. Up to how many hours? Will some Ferry trips be delayed until the next scheduled Ferry trip? Will the Ferry be delayed for a day or days ? If there are major delays in the Ferry Pictou will not receive as many tourists. The year that only one Ferry was running tourists who visited the Visitor's Information Centre in Pictou were down 30%. (I volunteered there). The disturbance to the sea bottom to dig up and lay the pipe will disrupt fishing in the area. The two most important means of income in this area are fishing and tourism. We cannot risk potential damage to our fisheries, tourism, our beaches or our drinking water supply.

Burning of Sludge

Northern Pulp cannot state with certainty the chemical composition of the effluent until their replacement facility is operational. Yet, they assert that it will meet or be below all regulations.

At Boat Harbour the effluent is currently treated for up to 30 days. It is my understanding that during this long treatment most of the heavy metals and hazardous chemicals sink in to the sludge. The treatment ponds are drained, the sludge is removed and then put in to a very large container cell.

The new proposal has the effluent treated for only about 24 hours. Then Northern Pulp is proposing to burn the sludge. They have disclosed what they expect in the air emissions when the sludge is burned. However, they also state they will not really know until the system is operational. I am concerned about the chemical and heavy metal concentration in the sludge being burned. Northern Pulp has a terrible history of at least 14 times they did not pass air quality tests. Furthermore, when they have failed air quality tests they are not shut down. They continue to operate. In the meantime residents have been exposed to cancer causing chemicals.

Having lived in Ontario for over 55 years, I have been shocked that Northern Pulp does their own testing and knows when Stantec, the testing company, will be arriving.No company should be allowed to do their own testing. When the company has failed air quality tests they should have been shut down immediately to investigate and solve the problem and then new air quality tests done within a week. The public does not know the results of the tests until a minimum of one month after the testing. It used to be 3 months. In the meantime when an air quality test has been failed, we have been exposed to toxic cancer causing air emissions without knowing it. This is unacceptable. Northern Pulp ran their power boiler for months with no pollution control equipment on it. The pollution control equipment was at the plant but they did not install it until a few months after they were told to. I cannot understand why any government department would allow this company to operate their power boiler with no pollution control equipment. Ontario would have shut them down immediately until the pollution equipment was installed. For a company that is on Canada's List of Environmental Offenders with a terrible environmental record Northern Pulp seems to have been given far too much latitude.

In summary, in view of Northern Pulp's poor environmental record, I have concerns about the pipe route for future pipe breaks or blow outs and Northern Pulp's inability to detect leaks. As well, the quality of the effluent will be worse than what comes from Boat Harbour. I also have concerns about the chemical emissions from the burning of sludge,as well as the impact on our tourist and fishing industries.

I am asking the Honorable Margaret Miller not to approve Northern Pulp's project. This project could damage our fishing, tourism, beaches, air quality, and Pictou drinking water. As a resident of Pictou since 2011, I am totally opposed to the pipe route going over the watershed for our drinking water. I am also opposed to the effluent pipe going in to the Northumberland Strait and burning the sludge. Residents of Pictou have the right to breathe clean air and drink clean water. We are counting on the Department of Environment to protect us.

In 1967 when Scott Paper opened there were very different considerations at play. Today we know how fragile our environment is and how we must make decisions to protect it now and for future generations.

Please do not approve this project.

Thank you for your consideration.

Appendix I

Northern Pulp list of failed emission tests, Ministerial Orders, Ministerial Directives, pipe blow outs, leaks, spills, warning reports, legally binding orders etc.. This list may not be complete due to my time constraints. It starts after Northern Pulp took over Neenah Paper at the end of March in 2011.

Summary from April 2011 to October 10, 2018

14	Failed air emission tests
2	or more Pipe blowouts / leaks *
1	Ash slurry spill
8	Directives
1	Legally binding order
5	Ministerial Orders
2	Warning Reports
1	Federal Fine \$225,000. **

*Due to time constraints for this response I could not determine how many of 5 other leaks at Indian Cross since 1985 occurred after April 2011.

**** Placed on list of Government of Canada's Environmental Offenders Registry. Convicted of Pollution Prevention provisions (subsection 36(3)) of the Fisheries Act.** Refer to: <https://environmental-protection.canada.ca/offenders-registry>

Details

Fall 2011 Exceeding
emissions power boiler particulate 634 mg/Rm3 standard 500 mg/Rm3

Feb 20, 2012 Directive under the Environment Act that the mill "provide written notification that the construction or installation of the power boiler air pollution control equipment has been completed." In his Directive to Northern Pulp, Inspector Specialist Marc Theriault also noted that the mill had broken Prohibition section 67 of the Environment Act, in that "No person shall knowingly release or permit the release into the environment of a substance in an amount, concentration or level or at a rate of release that causes or may cause an adverse effect..."

Spring 2012 Exceeding emissions power
boiler particulate 921 mg/Rm3 standard 150 mg/Rm3t

Fall 2012 Exceeding emissions recovery
boiler particulate 462 mg/Rm3 standard 375 mg/Rm3

March 7, 2013 Directive for Northern Pulp to "complete an engineering study for the recovery boiler air pollution equipment...and provide an implementation schedule by September 30, 2013." Another inspection report, dated March 7th, 2013, also written by Theriault, notes that "Stantec's Fall 2012 Source Emissions Testing Report...indicates particulate emissions exceeded the limit outlined...[for] total reduced sulphur concentrations." The USA's Environmental Protection Agency notes that

Sulphur Dioxide, especially when combined with other particulate matter (like that which comes out of Northern Pulp's stacks on a daily basis), can cause or worsen respiratory diseases, can aggravate existing heart disease and can lead to premature death.

Fall 2013 Exceeding emissions recovery
boiler particulate 666 mg/Rm3 standard 375 mg/Rm3t

November 4th, 2013 Directive for Northern Pulp to provide data on the total reduced sulphur levels on a monthly basis and a detailed description of the work being done to improve sulphur emissions.. Theriault's third report notes that they are still exceeding the Total Reduced Sulphur

February 9, 2014 Ash slurry spill reached Pictou Harbour.

June 10, 2014 Pipe blew out on Pictou Landing First
Nation releasing 47 millions of litres of "toxic" pulp mill effluent.

Summer 2014 Exceeding
emissions power boiler particulate 236 mg/Rm3 standard 150 mg/Rm3 Exceeding emissions recovery boiler
particulate 544 mg/Rm3 standard 375 mg/Rm3t

August 21, 2014 Issued a legally binding
order directing Northern Pulp to replace its precipitator and get its emissions in line.

Fall 2014 Exceeding
emissions recovery boiler particulate 390 mg/Rm3 standard 375 mg/Rm3t

April 7, 2015

Issued **Warning** report because information required by Condition 14c of Approval was not submitted on time. **Exceeding emissions power boiler particulate 155 mg/Rm3 standard 150 mg/Rm3 particulate 833 mg/Rm3 standard 375 mg/Rm3 322% of limit** **Exceeding emissions recovery boiler**

May 28, 2015 **Ministerial Order to install precipitator** and provide significant amount of information over the next 5 months. Northern Pulp shut down on May 30, 2015 and did not start up again until the precipitator was installed and operating.

June 25, 2015 Issued **Directive** dated June 15, 2015 and **Warning Report** dated June 25, 2015 because particulate emissions from the exceeded approval limit during the winter of 2015

September 2015

Exceeding emissions power boiler particulate 190 mg/Rm3 standard 150 mg/Rm3 127% of limit

October 26, 2015 **Environment Act Directives**

1. Pursuant to Environmental Act 122A(1) the following action(s) must be completed by November 30, 2015 Northern Pulp shall ensure an Independent **third party engineering evaluation be completed for the entire power boiler system** ... The evaluation shall recommend the necessary operational modifications and/or capital upgrade Intended to lead to lower emissions and **to contribute to achieving compliance with the power boiler emission limits** In Approval 2011-078857-A01.
2. Pursuant to Environment Act 122A(1) the following action(s) must be completed by December 31, 2015 **Within 30 days of the completion of the next scheduled source testing as required In 9(ac) of Approval 2011-o76857-A01, Northern Pulp Nova Scotia Corporation shall ensure that a final report on source testing is completed and submitted to the Department** that is consistent with the requirements of Approval 2011..076657-A01.

Jan 20, 2016

Conviction: Federal: Pollution Prevention provisions (subsection 36(3)) of the Fisheries Act **Amount of fine(s): \$225,000.00**

June 2016 **Exceeding the allowable emissions stack test**

September 12, 2016 Summary **Offence Ticket \$697.50** because the particulate emissions from the Power Boiler exceeded the approval limit in testing in Spring 2016.

November 21, 2016 Summary Offence **Ticket Sept 12, 2016 was withdrawn in Pictou Court due to faulty testing equipment**

December 2016 **Exceeding emissions power boiler particulate 157 mg/Rm3 standard 150 mg/Rm3 105% of limit**

May 31, 2017 **Directive** dated May 31, 2017 and **Warning Report** dated May 31, 2017 because **particulate emissions from the Power Boiler exceeded the approval limit during the fall of 2016**

June 2017 **Exceeding the allowable emissions power boiler particulate 224 milligrams per reference cubic metre. The boiler permit allows 150 mg/Rm3. 149% of limit**

Ministerial Orders 1 October 13, 2017, Northern Pulp Nova Scotia Corporation shall submit to Nova Scotia Environment (NSE) a detailed report which explains the **work planned for the scheduled October 2017 shutdown intended to lead to lower particulate matter emissions and to contribute to achieving compliance with the power boiler emission limits** in Approval 2011-076657-A01.

2. On or before November 15, 2017, Northern Pulp Nova Scotia Corporation shall submit to NSE a detailed report which explains the work completed during the scheduled October 2017 shutdown intended to lead to lower particulate matter emissions and to contribute to achieving compliance with the power boiler emission limits in Approval 2011-076657-A01.

3. On or before December 15, 2017 or within two weeks of receipt, Northern Pulp Nova Scotia Corporation shall submit to NSE the Jansen and Megtec reports (including conclusions and recommendations) and/or any other reports for the two audits completed on the power boiler and/or power boiler emission control equipment in the summer of 2017.

4. Effective the date of this Ministerial Order (MO) and **up to January 30, 2020, Northern Pulp Nova Scotia Corporation shall post all power boiler particulate matter emissions results** (i.e. The Source Testing Results - Power Boiler-Particulate Matter tables in the third-party consultant reports that are associated with Condition 9(h) of Approval 2011-076657-A01) **on the Northern Pulp Nova Scotia Corporation website** and/or other forums for public access. Each power boiler particulate matter emissions result

shall be posted within thirty (30) days of receipt of the associated final source testing report submitted by the third-party consultant

Feb 9, 2018 ash slurry leak reached Pictou Harbour

The Directive says the mill, located at Abercrombie Point near Pictou, must submit a plan to prevent further discharges of power boiler ash slurry into a ditch northwest of the facility's power boiler ash pond by June 29.

October 21, 2018 Pipe leak at Indian Cross discovered by a resident. This leak is still under investigation. It took over 2 weeks to clean it up. Northern Pulp's monitoring system did not detect the leak.

Norther

Northern Pulp
Committee Meeting Dec. 19th, 2018. .

Minutes of last meeting of the CLC

Everything seems perfect and the Effluent leak gets just a two line mention.

Date: December 19th, 2018

Location: Northern Pulp Pineo Boardroom

Attendees: NPNS Executive, CLC Committee Chair, NPNS Employee Representative, Representatives from Pictou, Moodie Cove, Abercrombie and Greenhill.

Regrets: Pictou Landing First Nation and Pictou Landing

Introductions & welcome members – introduction of new Abercrombie member.

Review of 2018 Environmental Plan and Introduction of 2019 Environmental Operating Plan

Water & Wastewater Objectives

- No effluent toxicity incidents in 2018.
- Dioxins and Furans again non detect as per the Regulations in 2018 (non-detect for last several years).
- BOD 1,200 kg/day range. TSS 1,500 kg/day range. Both well below regulated limits.

Air Objectives

- Ambient Air Monitoring stations located at Green Hill and Pictou Landing.
- No exceedances reported for 2018.
- Stack testing results for Power Boiler and Recovery Boiler located on PEC website, NPNS page.
- Recovery Boiler and Power Boiler particulate under regulated limits for 2018.

Action item: N/A for Recovery Boiler particulate testing on NPNS website should be noted and explained with *. Testing frequency outlined in the IA is now less than 4 times/year based on several years of low results.

Solid Waste Objectives

- Fulfill government requirements around solid waste regulations.
- Determine realistic ways of diverting solid waste away from landfill.
- Continue to segregate out domestic waste systems.
- Continue NPNS waste recycling program.

Woodlands Objectives

- Participate in the annual Sustainable Forestry Initiative Advisory Committee meeting
- Maintain current certifications held. ISO14001 Woodlands Environmental Management System and Chain of Custody (SFI, PEFC).

Other Objectives

- Maintain annual updates to environmental preparedness and response manual.
- Attend environmental courses or conferences where applicable.
- Continue to maintain an active Community Liaison Committee.

Pulp line break

Discovered land leak on Oct 21, 2018. No effluent entered the river. Consultant hired to evaluate and monitor the spill site. NPNS following all consultant recommendations – some complete, others in progress.

Cap and Trade

This program limits the amount of greenhouse gases NPNS can emit. Provincial government is trying to put a price on carbon gases. Nova Scotians will pay more for electricity and fuel beginning in January 2019. NPNS falls under the industrial sector of the cap and trade system.

Effluent Treatment Centre Replacement Environmental Assessment Process

- Initial EA submission planned for Fall 2018.
- Spring 2018 discovered ice scour on the route including the outfall location along with another shipwreck. June 2018 needed a new extension route. Outfall pipe required to be buried in deeper water.
- Spring 2018, hearing from community and stakeholders, NPNS took time to research alternate route. Began looking at Caribou route as an alternative. Completed a receiving water study for the new outfall location in deeper water.
- December 2018; filed an injunction against fishers to get survey boat work completed. Temporary injunction granted on December 18. Safety plans need to be developed to put surveyors back in the water.
- Treatment technology selected and purchased.
- MBBR Moving Bed Biofilm Reactor was purchased as an upfront step in the Activated Sludge Treatment (AST) process chosen. Well known vendor with proven technology.
- Oxygen Delignification study complete; project will follow after the treatment plant is completed.
- CLC members given two Eco Metrix studies that will form part of the EA submission. Members asked to review and comment.

1. EEM Monitoring Program.

2. Baseline Monitoring.

Action item: Incorporate CLC comments into the two Eco Metrix studies.

- Proposed pipeline will run along route 106 and runs alongside Pictou's watershed. CLC raised concern as it could affect town water in the event of a pipeline leak. EA will address concerns of Pictou town.
- CEAA, Fisheries & Oceans, Health Canada, Transport Canada and Environment Canada are all involved with NPNS EA submission.
- CEAA stated in May 2016, NPNS did not require a federal assessment.

Action item: Find a better way to share information on project delays with the public.

Continuous Improvement

In 2018 84 employees submitted ideas that were implemented on ways to improve NPNS operation and/or costs.

Communications

- Social media campaign continues, recent ads include stakeholder support, industry partnerships (Elmsdale Lumber, Darrin Carter Logging Ltd)
- Ongoing media relations strategy: Proactive when opportunities present (11th million tonne, Fill the Can Foodbank Fundraiser); with respect to effluent treatment facility projects – proactive and reactive measures.
- PEC, NPNS consistently communicating with Unifor Atlantic & National representatives to discuss collaboration efforts regarding ETF.
- Continued sponsorship of major events such as Summer Street Golf Scramble 2019; Coldest Night of the Year 2019.

Government Relations

2018 – 2019 Strategy

- Continue to broaden communication messaging audience.
- Inform employees with updates. Distribute internally all communication products released to public.
- Liaise with Atlantic Canada forest industry stakeholders.
- Continue to engage retirees.
- Expand audience reach with social media platforms.
- Implement phased communications plan focused on ETF.

Woodlands

Lahey Forestry Review

- Released in August 2018
- 80 meetings, 160 attendees and 250 written submissions were presented.
- 70 page report recommending change has been adopted.
- Took into account ecosystems and biodiversity.
- Triad model approach to forestry.
- 30% of forest is to be left natural from crown owned lands for conservations.

- 15 – 20 % is intensive forestry and can be clear cut.
- 30% of land is owned by private woodlot owners.
- Lahey put forth 45 recommendations in a package deal. No cherry picking.
- All recommendations were adopted.

Action item: Arrange for a tour of the Debert nursery in the spring/summer of 2019.

Comments from CLC members:

- Fishing and Forestry should continue to co-exist together.
- Most of the concerns around the county are about the effluent pipe.
- Some information on Facebook and around the coffee shops is wrong and misleading.
- Some people already have their minds made up and don't care about facts.
- Political overtones playing on public fear.
- Government is in conflict. A federal assessment would take it out of the NS provincial governments' hands.
- PLFN would need to support an extension to the BHA.
- Building trust is a long term process. The info presented today should be given to the public as there was not a large attendance at the information sessions in December 2017.
- Try to explain our plans in plain language so the public is able to understand some of the more complex work being done by NPNS.
- Focus more on the federal regulations that govern the industry.

Meeting adjourned.

The End

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 10:41:09 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@bellaliant.net)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Review
Date: March 6, 2019 10:42:39 PM
Attachments: [Letter to Minister.doc](#)

Dear Hon. Margaret Miller

Please accept my letter to the response of the Northern Pulp document submitted recently on the pipe to be placed in Northumberland Strait.

Thanks

This email has been checked for viruses by Avast antivirus software.

<https://www.avast.com/antivirus>

March 6, 2019

Honourable Margaret Miller
Minister of Environment
Province of Nova Scotia

Dear Hon. Miller:

Re: Northern Pulps Replacement Effluent Treatment Facility Project

This letter is one of many that I hope will be written to you from the people of the Province of NS that are concerned about what is happening in Pictou County with Northern Pulp and our waters.

I am a life long resident of Pictou area and 4th generations in the fishing industry and I also have had family in the logging industry.

Have been educated in this province and presently work with municipal government but for over 10 years I owned and operated a Bed & Breakfast in the Town of Pictou. I consider myself very lucky to have grown up in this area and the Province of Nova Scotia and I am a proud Maritimer that cares about what happens to our environment and our province.

The document submitted by Northern Pulp is 1700 pages long and the public has been given 30 days to respond to this lengthy and technical detail report. A lot of this report is above the average persons understanding but still was good to be available to the public although many feel there are some things left out and one concern is the mercury content.

Although there are many concerns my biggest concern is the effluent along with the thousands of litres of warmer water that will be pumped into the Northumberland Strait. This will kill lobster larvae and god knows what else; it's inevitable and would directly breach Section 36 of the Federal Fisheries Act. A federal assessment is inevitable. The fact is that the sea bottom, where Northern Pulp plans to dredge to bury the pipe in Caribou Harbour and the Northumberland Strait, is federal land, which I believe should necessitate a federal assessment. A full Federal assessment study should be done on the marine environment with the millions of litres of effluent that will be discharged into the Northumberland Strait once the pipe hopes to be in place. Our waters are under federal protection. Also enough evidence has shown that the likely hood that it will cause adverse effects or environmental with effects to our eco system. This is very concerning to us all.

Also, many people worry that the provincial government cannot fairly assess this effluent treatment plan for a pipe to enter into our ocean. The province should step aside because of the conflict of interest and the Canadian Environmental Assessment Agency be given this due to the Province of Nova Scotia is really an employer to Northern Pulp. I feel the government should no longer be subsidizing a foreign owned company.

Bleached Kraft mills are killing us and damaging our environment, maybe its time changes are to be made. Do we really need to have pure white paper and toilet paper at such a cost to us all and if so then a better way of doing so needs to be looked into and not to be killing our province and water to provide this?

Please do not let our province choose money and a foreign owned company over our water, air , food and our health.

Sincerely,

, Pictou Co. NS

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 11:08:14 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
@bellaliant.net)

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 6, 2019 11:17:41 PM

Project: replacement_effluent_treatment_facility_project Comments: As minister of the environment I strongly feel that this project requires alternate solutions. This is a great opportunity for a pulp mill and province to invest in a closed loop system and look at how this may be an advantage economically for the company. Continually our province makes decisions based on fear of loss of jobs instead of being at the forefront of innovation and creating long term jobs. We are about to fix boat harbour and introduce an entire new set of problems. Should this project move forward it will certainly be an instant regret and another future problem and cost for the province. I spent my youth on these shores and am now an avid fly fisherman. The eminent loss of Atlantic salmon habitat alone would be enough to reject this project. It is certainly enough to require a full environmental assessment. There is so much investment from all parties to market and fight for something we all no will be detrimental to this sensitive ecosystem. All of th is private and public money should be going towards finding a solution that solves the problem. Please make this a defining point in your career where you reflect back on this decision with pride. C a must. F is the right choice. c an environmental-assessment report is required - An environmental assessment report is a much larger report, or series of reports, analysing the environmental issues raised by the entire project. This report would be produced within 2 years, and is then followed by a public review period, a review either by a Panel or by the Minister, and a decision would be made at the end of that process. The whole process could take up to 3 years or more to complete. f the undertaking is rejected because of the likelihood that it will cause adverse effects or environmental effects that cannot be mitigated Name: Email:

@hotmail.com Address:

Privacy-

Statement: agree x: 74 y: 21

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 6, 2019 11:45:49 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@telus.net)

@ns.sympatico.ca
Caribou Island, NS,

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, NS, B3J 2P8

March 5, 2019



Good morning ladies and gentlemen,

This letter has been prompted by Northern Pulp Nova Scotia's Replacement Effluent Treatment Facility Environmental Assessment Registration Document.

WHO WE ARE

My name is | and I live on Caribou Island with my wife,

|
|
|
|

Through my various promotions with Scott Paper Limited, a distant cousin of Scott Maritimes, I worked in their New Westminster, B.C. mill which manufactured paper towels, bathroom and facial tissue. Some of these were produced from its own groundwood pulp, which was bleached with hydrogen peroxide.

Although I prospered with the company, after 5 years in Toronto I decided to return to Halifax to better raise our family. It was a difficult decision as over 18 years I had grown considerably within Scott Paper Limited, one of the most reputable companies on the Toronto Stock Exchange. We now live full-time and work on Caribou Island.

NPNS' RETF PROPOSAL PERPLEXITIES

I have several concerns, particularly the following that I would like you to take into account when deciding on the merits of accepting NPNS' RETF proposal as is.

A.

It is truly astonishing how over a half-century of producing mill effluent, there is so little science from Northern Pulp on determining the array of compounds that are part of its effluent, despite world renowned oceanographic institutions — the Bedford Institute of Oceanography and Dalhousie University's Department of Oceanography — nearby.

Possibly the following statements from NPNS' Replacement Effluent Treatment Facility Environmental Assessment Registration Document (RETF EARD) may offer an explanation.

Presently, there is no regulatory requirement to conduct a human health risk assessment (HHRA) study in association with the NPNS project. The project is currently in a Class 1 EA Process in Nova Scotia that does not specifically require the completion of a HHRA (Human Health Risk Assessment) in advance of registration of an EA.

NPNS' RETF EARD 9.0 Page 489

So,

At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentrations) will not be known with certainty until the project is operational.

ibid 9.1 Page 489

Nevertheless, NPNS has advanced, from Australia, the Toxikos 2006 study 'Comment on Bell Bay effluent and potential impact on nearby seal colonies' for a future Human Health Evaluation. NPNS regularly states the mill effluent in the Toxikos report is comparable to that of its own projected operation, and therefore the risks to human health are negligible:

The Toxikos (2006) HHRA was a highly conservative assessment that substantially overestimated exposure and risk to potential human consumers of fish and shellfish that may be influenced by the effluent diffuser discharge in Bell Bay. The authors concluded that there were negligible risks to human health from consuming any marine food item harvested in the vicinity of the effluent diffuser, for any of the substances that were assessed in the HHRA.

Ibid 9.1 Page 491

However an audit of the Toxikos (2006) study's methodology by Dr. Andrew W. Wadsley was released in May 2007, with the following contradictory conclusion:

This review found that calculation errors, use of inappropriate parameter values, failure to include background dioxin concentrations, and failure to use the permitted maximum limit of dioxin in the pulp mill effluent, results in an underestimation of dioxin concentrations by a factor of 1,390 in the Human Health Risk Assessment and by a factor of 90 in the Marine Impact Assessment. The impacts of these errors are far reaching and invalidate all of the quantitative ecotoxicological analyses prepared for assessment under the Tasmanian Pulp Mill Assessment Act 2007 and for assessment of the pulp mill project under the Australian Environment Protection and Biodiversity Conservation Act 1999.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.582.2806&rep=rep1&type=pdf>

The Wadsley audit was cited in 2010 by the Tasmanian Times

<https://tasmaniantimes.com/2010/08/why-tasmania-needs-a-science-reform-commission/>

which also included this paragraph:

In an article by Charles Waterhouse from The Sunday Tasmanian on 24 September 2006 were excerpts from a leaked DPIPWE draft review of Toxikos' assessment on impacts on marine life from the proposed Gunns Pulp Mill.

The draft states:

'Toxicos fails to conclude or describe the risk to seals of bioaccumulating dioxins from exposure to pulp mill effluent. Evidence exists that the effect of exposure is significant, "therefore the Toxicos implication is misleading and their conclusion false". Toxicos states that dioxins are not significantly bioaccumulated by fish. This statement is profoundly inaccurate, misleading and directly contradictory to references cited by Toxicos and Toxicos statements. The method used to determine the risk of bioaccumulation in fish is inappropriate. The assessment using effluent concentration by Toxicos is invalid and misleading and all conclusions based on this information are unsubstantiated. Toxicos demonstrates a complete lack of understanding of the meaning of biomagnification.'

The conclusions from the Toxidos (2006) study and the Dr. Andrew W. Wadsley's audit are so contradictory that a thorough Human Health Risk Assessment is called for prior to releasing NPNS' effluent into the Northumberland Strait as its impact on *sensitive aquatic organism, marine mammals, birds, fish and humans* may be significant.

B.

Should any of the *sensitive aquatic organism, marine mammals, birds, fish* be adversely impacted, would the repercussion on Nova Scotia's fishing industry be at all similar as to when Alberta discovered in 2003 one black Angus cow to have bovine spongiform encephalopathy (mad cow disease) which caused the United States to immediately close its borders to Canadian beef and cattle which in turn caused about another 40 countries to follow suit?

<https://globalnews.ca/news/1830438/timeline-canadas-2003-mad-cow-disease-crisis/>

C.

The effluent's proposed outfall location is a particularly poor one. On the western side of the proposed outfall, the Caribou Island lighthouse is less than a couple of

kilometers away. Attached below is the Nautical Chart for the Caribou Harbour and it is clear how shallow the harbour is at this point. I recall one concerning experience while circumnavigating the island on my Expedition sailboat, a laser hull with a single self-furling sail, and running aground while attempting to get out of the incoming ferry's way.

On an incoming tide, especially as the current at this point circles clockwise, a good portion of the effluent will flow into the harbour; and whatever solids that are in the effluent will likely settle on the shallow shores, possibly edging Caribou Harbour towards becoming another Boat Harbour.

<http://fishing-app.gpsnauticalcharts.com/i-boating-fishing-web-app/fishing-marine-charts-navigation.html?title=CARIBOU+HARBOUR+boating+app#12/45.7600/-62.6850>

It is clear that the proposed plan B water route has not been surveyed nor sampled.

The Water Quality data off Caribou Island is from Pictou Harbour,

This section provides an overview of water quality sampling in Pictou Harbour in 1990, 1995 and 1998 (Dalziel et al. 1993; JWEL 1996; ENSR 1999). Pictou Harbour was used as a proxy for Caribou Harbour with respect to water quality, in the absence of available water quality data for Caribou Harbour.

NPNS' RETF EARD Environmental Effects Assessment 8.11.2.4 Page 143

Surely the Environmental Assessment Branch, Nova Scotia Environment should request the NPNS' proposed plan B water route to include a survey and sampling of this very different Caribou Harbour.

In conclusion, I would like to say that we have been blessed to build a home on the shores of the Northumberland Strait. The Waterside beach is large and magnificent. We get lobsters and scallops harvested off our strand by a fisher friend and occasionally we share our neighbour's oysters from her licensed but

still secret oyster bed in Caribou Harbour. In the fall we watch the northern gannets dive into herring schools, marvel as red-throated loons moult their red plumage, enjoy the night-ballet of lit herring-boats knowing that winter is fast approaching. We shall feed the crows, pheasants, chickadees and snow buntings. Some years gray seals give birth on the ice off the Hamilton Point. In late spring, we will witness fawns and now less frequently kits. In the summer, children and parents will build sand castles by the water's edge. By August, when it is too hot in New Glasgow, Trenton, Stellarton, Westville and Pictou, families will come to cool off in the Strait's balmy waters.

We have shared this wonderful corner with Korean, French, Chinese, Afghani, British, Austrian, Angolan, Portuguese, Iranian, Mauritanian, Turkish, American and Canadian friends who have all expressed what a beautiful spot this Caribou paradise is. It is truly one of Nova Scotia's unsung treasures. Please protect Caribou Harbour and the Northumberland Strait for Nova Scotians, our children, our fishers and the friends of Nova Scotia.

Yours sincerely,



February 25, 2019

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, Nova Scotia B3J 2P8
EA@novascotia.ca

The Honourable Margaret Miller
Minister of Environment
minister.environment@novascotia.ca

Dear Minister Miller,

Re: Northern Pulp's Replacement Effluent Treatment Facility Project

I am writing in response to Northern Pulp's Replacement Effluent Treatment Facility Project. I am a resident of _____ in Pictou County, where I have lived for the past _____ years, raised my _____ children, planted and harvested gardens. My home borders on the Caribou River; at high tide I can canoe down river, under the Waterside bridge, to the ferry side of Caribou Island. It is in very close proximity to where the proposed effluent pipe would be located.

It is very evident, as I have canoed those waters over the years, how closely connected all these waters are. The Caribou River is brackish (the salt water from the Strait floods the river at high tide) bringing salt water, seaweed, crabs, the occasional seal. It is clear how closely connected this river is to the waters on the other side of the bridge, to the waters of Caribou Harbour, as they rise and fall at high and low tide.

I taught elementary school in _____ and every morning, as I drove the Shore Road _____ over two bridges, I saw how interconnected all these waters are.

This river is home to trout, smelt, great blue herons, eagles, kingfishers, to name but a few.

I lived in Pictou when we first arrived, _____ years ago, where the odor of the mill made people close windows and avoid going outside. _____, there were days when the smell made you close your car windows and want to leave town.

During these _____ years, I have been aware of a multitude of issues with the mill:
effluent spills
pipe breakages and leaks
pollution in the air
the death of Boat Harbour
the impact of the mill's pollution on Pictou Landing
the huge amount of water the mill consumes every day
the huge amount of effluent discharged every day
health problems that people in the area have reported (a study was done by Dr. Daniel Reid decades ago)
the clearcutting of Nova Scotia

Many of these are issues no matter how the effluent is disposed of. But I want to speak specifically to the proposal at hand. There are major gaps in the information:

There has been no study about the effects on lobsters.

There is no information in the proposal about what the effluent will be composed of.

The effluent will be more dangerous than the current Boat Harbour because of polishing.

Toxins that will accumulate over time have not been addressed (The Department of Environment has said that the current level of toxins already don't meet current standards.)

There is no specific route for the pipe, so there can be no review of the safety of the route. (As far as we know, the proposed route runs a pipe along the Causeway, through Pictou's watershed, beside the road to Caribou Harbour, around the end of Caribou Island . . .)

These are all identified risks that need more investigation.

When there is a breakage in the pipe, and there are breakages in all pipes, it will be an ecological disaster, affecting drinking water, the fishery, the tourist industry, our homes, the life of fish, animals, and plants. The effect will be widespread, as tides and currents spread the effluent, and disastrous.

We know what resulted at Boat Harbour, and we know how important our environment is for our survival, as a country, as a province, and as a country. We know that we cannot afford to take a chance. We know that we need a further, and federal, assessment of Northern Pulp's Replacement Effluent Treatment Facility Project.

I ask you to reject this proposal. If you refuse to reject it, I ask you to make no decision before further assessment.

Sincerely,

(; Nova Scotia.

February 28, 2019

I am writing to you to ask you reject the proposal by Northern Pulp to dump 90 million litres per day of effluent into the Northumberland Strait.

I have a BFA and work as a fisher in the Northumberland Strait. I moved to Pictou County as a child in 1967 when my father took a job with the opening of the pulp mill. Fifty years ago good wages seemed like the only important thing. Now we see the adverse health effects that those decisions, made half a century ago, have on those we love.

I have struggled deeply to write this letter. I want you to feel how devastating your decision could be on this area and the people that call it home. I cannot believe that in 2019 we are even considering allowing a foreign company to destroy an ecosystem that provides such solace to so many, in harmony with a lucrative fishing industry. They say when you know better, you do better. WE SEE BOAT HARBOUR....we see the millions that is going to cost to clean itwe know better. DO NOT LET BOAT HARBOUR HAPPEN AGAIN. Not to our Strait.

The Northern Pulp propose project must be rejected because:

1) No current data regarding the significant adverse effect that the proposed outfall will have on the area has been done. I have seen firsthand how extremely sensitive to wind and weather and the resulting silt has on lobster and crab fishery in this area.

I remember when the adjacent area formerly known as Little Entrance was permanently filled in by a storm in 1979 making Munroes Island no longer an island. Data about tides in this area, used by NP, predates this event. Thus making it impossible to predict the current tidal patterns in the area.

QUOTE:" 2.1.2 Physical Oceanography

Even though some oceanographic and hydrometric data are 20 to 30 years old, it is reasonable to believe that the amplitude and direction of tides and currents did not appreciably change to affect the results of this study. Similarly, ocean water temperature and salinity are relatively constant characteristics and are unlikely to have significantly changed over the past 30 years. "

(Northern Pulp Environmental Assessment Report)

QUOTE : "Two channel entrances once defined Caribou Harbour, the Big Entrance between Caribou and Monroe's Island where the PEI ferry passes through, and the Little Entrance at the eastern end of the harbour. In 1979, a massive storm swept already encroaching silt into Little Entrance and closed this second passage permanently.

The 100 ft wide channel was the deepest point in Caribou Harbour separating Munroe's Island from the mainland.

In 1937 construction began at Caribou Harbour on a ferry terminal to serve traffic between Nova Scotia and Woods Island, PEI. Some say that the project's dredge was dumped too close to shore creating more silt. Construction of terminal altered the sediment patterns along the northern side of Munroe's Island and also affected the Little Entrance."

*(This research was supported by the Social Sciences and Humanities Research Council
This project was developed by Katherine Knight of York University)*

2) The proposed area borders an extremely popular Caribou/Munroes Island provincial park and nature reserve. I see the pleasure that it brings to locals and tourists to be able to walk on such a pristine place.

QUOTE:" When some people want a vacation, complete with history, scenery and great experiences, they call a travel agent. Those who want to experience all this and more without breaking the bank visit Caribou/Munroes Island Provincial Park in Pictou County.

Visitors to the Caribou/Munroes Island park can enjoy the mile- long sand beach and warm salt water swimming. There is also a walking trail along the beach that leads to Munroes Island, which was a farm until the 1940s and is now a wilderness reserve. Eagles, ospreys, seals, herons and many other species of birds are seen on the 10-kilometre round trip."

*(<https://novascotia.ca/news/release/?id=20030626004>
Natural Resources (to July 2018) NATURAL RESOURCES--Caribou/Munroes Island Provincial Park A Perfect Stop)*

3) The Northumberland Strait proposed area has not been thoroughly studied. The research is for the Pictou Harbour proposal.

QUOTE:" **1.3 STUDY AREA**

The study area (*Figure 1-1*) comprised an area of 46 km x 42.5 km (*Table 1-1*), encompassing the surrounding waters of the estuary of East River, Pictou Harbour, Pictou Road, Boat Harbour, and offshore into the Northumberland Strait." (Northern Pulp Environmental Assessment Report)

The elements that led to the rejection of the proposed Pictou Harbour site are present at the new Caribou Point proposed site. Caribou Point is extremely shallow water. It is location of commercial and recreational fishing, as well as home to migrating birds. No information is provided on the significant effect daily distribution of effluent would have on this area.

QUOTE:" File: 121414584 2.32

The potential outfall location initially proposed by KSH at approximately 500 m from the mill and outlet of the Pictou Causeway (HWY 106) was not considered further in this study for the following reasons:

- It was located in a shallow water in the range of 3 to 4 m. This depth range did not meet the criteria for preferred water depth for a discharge point for the effluent, including a likely reduced capacity for effluent mixing in the receiving environment at these depths.
- The presence of environmental sensitivities in the general vicinity of this location. These sensitivities include gaspereau fisheries and migratory bird habitat particularly in the winter." (Northern Pulp Environmental Assessment Report)

4) Public consultation was for the Pictou Harbour site proposal not the current Northumberland Strait proposal.

Nothing less than a full rejection of the Northern Pulp Effluent project is acceptable. No extension should be given. Northern Pulps' own EP report states that they knew about the closing of Boat harbour since 2015.

QUOTE:" 2.1.3 The Boat Harbour Act

In June 2014, there was a leak of untreated effluent due to a breach in the transmission pipeline from NPNS to the existing BHETF. This leak prompted conversations between the Province and Pictou Landing First Nation (PLFN), eventually culminating in a commitment to close the BHETF and remediate the area. The introduction of the *Boat Harbour Act*, which received Royal Assent on May 11, 2015, prohibits the use of the provincially-owned facility for the receipt and treatment of effluent from NPNS after January 31, 2020." (Northern Pulp Environmental Assessment Report)

I am including photos because I want to put a face on the people whose lives and futures you hold. I want you to see the Northumberland Strait as the place of beauty that we do. Not as the environmental dump it is proposed to be.

We are counting on you to do the right thing.

@gmail.com





This is an aerial photo taken by Jeff Vienneau (www.avinova.ca). Posted by author.

File: Caribout Island Light.jpg
Created: 19 June 2007

The mouth of Caribou Harbour.



March 2 2019

Northern Pulps proposal to pump effluent into the Northumberland Strait must be rejected because of the significant adverse effect that it will have on the Strait.

I was born and raised in Pictou county. I have fished the waters of the Northumberland Strait for years. There was a time when we did not think much about the effects our actions had on the ocean. We see now firsthand how fragile the ocean is. We now work with DFO to preserve an ecosystem, an industry and a way of life. We have reduced our lobster trap numbers from 300 to 280, stopped fishing single trap trawls and are increasing the carps size. We have also increase the web size of our herring nets to allow the small fish to go free. In recent years we have seen the Northumberland Ferries Limited and the town of Pictou implement sewage systems, so that they no longer dump their sewage into the ocean . Land owners along the Strait have built sea walls to stop erosion and the accompanying sediment. And these changes are working. The last several years have seen an increase in lobster catches in our area. Sustained scallop seasons.

Proving that our oceans and fishery are sustainable is very important to the world. Dumping industrial waste into the ocean does not constitute Sustainability. This is a step backwards for Nova Scotia ...for Canada.

"Our Oceans, Our Future

As Canada's Minister of Fisheries and Oceans, it gives me great pleasure to present Canada's Oceans Strategy. This far-reaching policy framework will make Canada's vision for modern oceans management a reality.

As a country bordered by three oceans, Canada is truly an oceans nation. Today we see an ever increasing number of demands on oceans and their resources. While traditional fishing and marine transportation continue to be of prime importance, they are now joined by other uses, such as aquaculture development, oil and gas exploration and development, recreational and commercial fishing, and eco-tourism. Canada's oceans also support important features of Canada's social and cultural identity. Managing these demands is critical to the protection of the marine environment and the long-term sustainability of Canada's oceans and their resources.

On January 31, 1997, the Government of Canada brought the Oceans Act into force, making Canada the first country in the world to have comprehensive oceans management legislation. The Act authorizes the Minister of Fisheries and Oceans Canada to lead the development of a national oceans management strategy, guided by the principles of sustainable development, the precautionary approach and integrated management."

source: Robert G. Thibault

Fisheries and Oceans Canada, Oceans Directorate, *Canada's Oceans Strategy*, 2002, Cat. No. Fs23-116/2002E, Ottawa - Ontario: Fisheries and Oceans Canada 2002, iii

My fishing grounds are the waters along Caribou Island. It is an extremely fragile area. It is extremely sensitive to water temperature changes. If we get a Nor-Eastern the water becomes brown with sediment. It takes several days for the sediment to clear and fish to return. Northern Pulp proposes to dump 90 million litres of effluent per day on this area. Northern Pulp estimates that the propose pipe will dump 48mg of Suspended Solids per litre into the Strait. For a grand total of 4.32 tonnes of Suspended Solids per day. This is daily. That is 1,576 tonne per year. The area will never have a break / never be given a chance for it to recover. *The long term effects of this have to be studied.*

"(5.6.1 Replacement ETF Effluent Discharge

Adsorbable Organic Halides (AOX) mg/L 7.8

Total Nitrogen (TN) mg/L 6.0

Total Phosphorus (TP) mg/L 1.5

Colour TCU 750

Chemical Oxygen Demand (COD) mg/L 725

Biochemical Oxygen Demand (BOD5) mg/L 48

Total Suspended Solids (TSS) mg/L 48

Dissolved Oxygen (DO) mg/L >1.5

pH - 7.0 to 8.5

Temperature oC

25 (winter)

37 (summer)

Total Dissolved Solids (TDS) or Salinity g/L 4

Additionally, the project is designed with key established water quality guidelines and/or will meet ambient water quality (current background) at the edge of a standard mixing zone (CCME 2009 - Canada-wide Strategy for the Management of Municipal Wastewater Effluent)."

source:(NP EP Proposal)

The sediment from the construction of the pipe alone will be catastrophic. We have witness firsthand the significant adverse effect that the construction of the Confederation Bridge, in 1993, had on the fishery. It has taken about twenty three years for lobster stocks to return up to 90km away. This was a finite project, with a recovery time. The proposed NP is a constant 4.32 tonnes per day! Every day.

I've always had a sense of pride about living in Nova Scotia, Canada. I've felt that we were moving forward towards a greener country. Northern Pulp's proposal to dump effluent into the Northumberland Strait is a step backwards. I am asking you to **Reject the proposal on the grounds that the significant adverse effects cannot be mitigated.**

@gmail.com



From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 1:04:38 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 2:53:46 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 4:41:17 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@yahoo.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 8:15:37 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@rocketmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 8:35:28 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Everybody must be protected in this situation and a solution for all is there. I fully support this application be approved.

Signed by: _____
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 9:03:09 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

If NPNS closes it will put the whole community in an economic crisis. Pictou County cannot afford to lose these jobs and many people would have to leave here to find work elsewhere. These are good paying jobs and they need to stay here.

Signed by:

@northernpulp.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 9:38:29 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
 @eastlink.ca)

NS

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 9:45:26 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@tncweb.ca)

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 9:45:30 AM

Project: replacement_effluent_treatment_facility_project Comments: The ocean doesnt belong to a corporation its everyones resource. Why we are even going through an assessment period, is wrong on so many levels. The effluent is poison, pure and simple. People cant drink the effluent, so why would we ever allow it to be dumping into the ocean in our backyard? Lets stop this once and for. Name: Email: @hotmail.com Address: Municipality: Postal-Code: Phone: ### ### - ##### Fax: ### ### - ##### email_message: Privacy-Statement: agree x: 74 y: 11

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 9:48:54 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 10:10:38 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Give the mill a chance to get it right. They are trying to do their best to make it right. Pictou County can not afford to lose the mill.

Signed by:
@hotmail.com)

From: @yahoo.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 10:10:39 AM

Project: replacement_effluent_treatment_facility_project Comments: My son will be the 4th generation of fish harvester to depend on the Northumberland Strait to provide a living for he and his family the effluent pipe into the Strait represents a serious treat to his families future my parents and my family have endured years of poor/dangerous air pollution from the mill, property values in the town of Pictou have fallen and local business in the tourist industry have suffered a move to pipe sludge from the mill into the Strait is a terrible idea and shutting the mill down now will provide many remediation jobs to the county, now is the time to act and do the right thing!! Name: @ Email: @yahoo.com

Privacy-Statement: agree x: 50 y: 21

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 10:38:54 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 10:47:12 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 11:00:08 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by: _____
@hotmail.com)

ON

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 11:33:27 AM

Project: replacement_effluent_treatment_facility_project Comments: Please make sure the Province of Nova Scotia sticks with the deadline for closing off effluent to Boat Harbour. 5 years was more than enough time to fix this. Name: Email:
@gmail.com

: Privacy-Statement: agree x:

50 y: 14

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 11:37:47 AM

Project: replacement_effluent_treatment_facility_project Comments: I am not in support of a pipeline for effluent to flow into our waters. Our fishing industry and the environment that keeps it healthy is much more important than mill jobs. If the mill can not operate without polluting our environment, it needs to close. Name: Email:
@gmail.com Address:

: Privacy-

Statement: agree x: 70 y: 28

From: @yahoo.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 11:49:41 AM

Project: replacement_effluent_treatment_facility_project Comments: I vote for Project
Alternative 1 - Do nothing and close the NPNS Mill. Name: Email:
@yahoo.ca

: Privacy-Statement: agree x: 56

y: 23

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 12:38:16 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 1:09:47 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@live.com)

From: [Environment](#)
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 1:09:53 PM

Project: replacement_effluent_treatment_facility_project Comments: To whoever this may concern I am against a pipe flowing into the strait , I know you only consider the jobs and the economy but for the sake of 300 jobs why do you want to kill thousands of people . This proposed pipe will go directly across the water table for the town of Pictou and surrounding communities . This pulpmill has never given a damn about people . I myself have hauled paper from this mill back when it was owned by Scott in those days we could eat at the cafeteria and when it was smoke smog or steam down low to the ground you drove into the mill where you load and you could stay in there so you were not trying to tie down the load in the smog . Then along came Nima who now stopped us from going to the cafeteria or even use the washroom and no more tying down the loads inside out of the smog , along comes sinar mars and now you had to sit outside in the smog to put the loads on or tie them down outside .. I was in boat harbour this past fall cleaning out one of the settling ponds and I asked if they were giving us a course on contaminants they said no none needed , I only worked 2 days and had sores on my face around my eyes and red and sore eyelids .. why ??? , they had to replace me because I refused to go back there you think that just pumping it into the sea is good . I did not touch the sludge I hauled to northern pulp as I call it THE BLOB ... Name: Email: Address: Municipality: Postal-Code: Phone: #### ### - ##### Fax: #### ### - ##### email_message: Privacy-Statement: agree x: 61 y: 10

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 1:15:54 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

In solidarity. JB

Signed by:
@rogers.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 7, 2019 1:18:18 PM
Attachments: [image001.png](#)
[EA Letter.pdf](#)
[NNS Intake Pipe.pdf](#)
Importance: High

Dear Minister:

Re: Northern Pulp's Replacement Effluent Treatment Facility Project

I am writing to you as a concerned citizen, a lobster fisherman and business owner. As an owner of North Nova Seafoods Ltd (NNS) a seafood processing plant located in Caribou I am concerned on a number of levels – for the community, the plant workers jobs, the fishermen and the direct effects on the plant operating processes.

This plant operates year-round processing a variety of species including Lobster, Snow Crab, Rock Crab, Jonah Crab, Shrimp, and Herring. Throughout the year the plant employs over 150 people here in Pictou County with direct wages paid out each year over three million dollars.

As part of the process here in the plant there is an intake pipe out in the harbour that takes water into the plant used during the cleaning process. The plant has many wells on site that are also used during the processing, but this is not enough water to support the plant. The intake pipe is necessary for the plant to operate. The water is tested regularly to ensure that it is cleared to use. This is a very sensitive issue as the plant is making a ready to eat product and there are obviously strict CFIA guidelines that are followed here. This intake pipe will be a mere few kilometers away from where the proposed effluent pipe is going. With a proposal to discharge 70-90 million litres of treated effluent from a bleached kraft mill every day this will obviously shut the plant down from using the intake pipe anymore for the necessary water to operate. I have included some pictures to give you an idea of exactly what we are looking at with the pipes.

On top of the jobs that the plant provides it also supports hundreds of fishermen with T4's issued to them in the 10's of millions of dollars each year. NNS

operates its own private wharf right here in Caribou in front of the processing plant. This wharf supports over 60 local fishermen. NNS then puts trucks on the roads all year long going to about 10 wharfs directly here in the Strait then over another 50 throughout NS from Cape Breton to Yarmouth and into PEI and NB. NNS and myself as a lobster fisherman is very concerned about the harm to fish and fish habitat that could result from Northern Pulp's proposal to discharge 70-90 million litres of treated effluent from a bleached kraft mill every day through a 10.5k pipe into the prime fishing grounds of the Northumberland Strait.

Thousands of families from all three provinces, including First Nation communities in those provinces, make their living from these fisheries. Many fishermen come from families which have fished for generations. They have made changes to help keep our waters clean, so that their children and grandchildren can fish also. Owner-operator fishermen are an important part of our regional economies. Fishermen generate many jobs in our communities. They buy their supplies locally, and they spend their profits locally.

I am also concerned about the continued health of the Northumberland Strait, which attracts thousands of tourists, visitors and summer residents who fish, dive, swim and boat in its beautiful waters. The Northumberland Strait is a key part of life and the economy of Pictou County and draws people to our area.

I am further concerned about the health of people living close to Northern Pulp. For decades air emissions from the mill have been a problem affecting residents' health and local businesses. Northern Pulp has frequently failed stack emission tests. The new treatment proposal would add additional air emissions to an already bad situation.

I believe this project requires a more rigorous review than it will receive from the province of Nova Scotia, which has decided to require only a Class 1, 50-day review, including only 30 days for public comment.

The government's past handling of effluent from this mill has resulted in one of the most contaminated sites in Canada, Boat Harbour. I want to see a strong, science based review of this project which will protect the present and future health of our Strait and the economy which depends on healthy waters.

Sincerely,

Controller

[@nnseafoods.ca](mailto:nnseafoods.ca)





Dear Minister:

Re: Northern Pulp's Replacement Effluent Treatment Facility Project

I am writing to you as a concerned citizen, a lobster fisherman and business owner. As an owner of North Nova Seafoods Ltd (NNS) a seafood processing plant located in Caribou I am concerned on a number of levels – for the community, the plant workers jobs, the fishermen and the direct effects on the plant operating processes.

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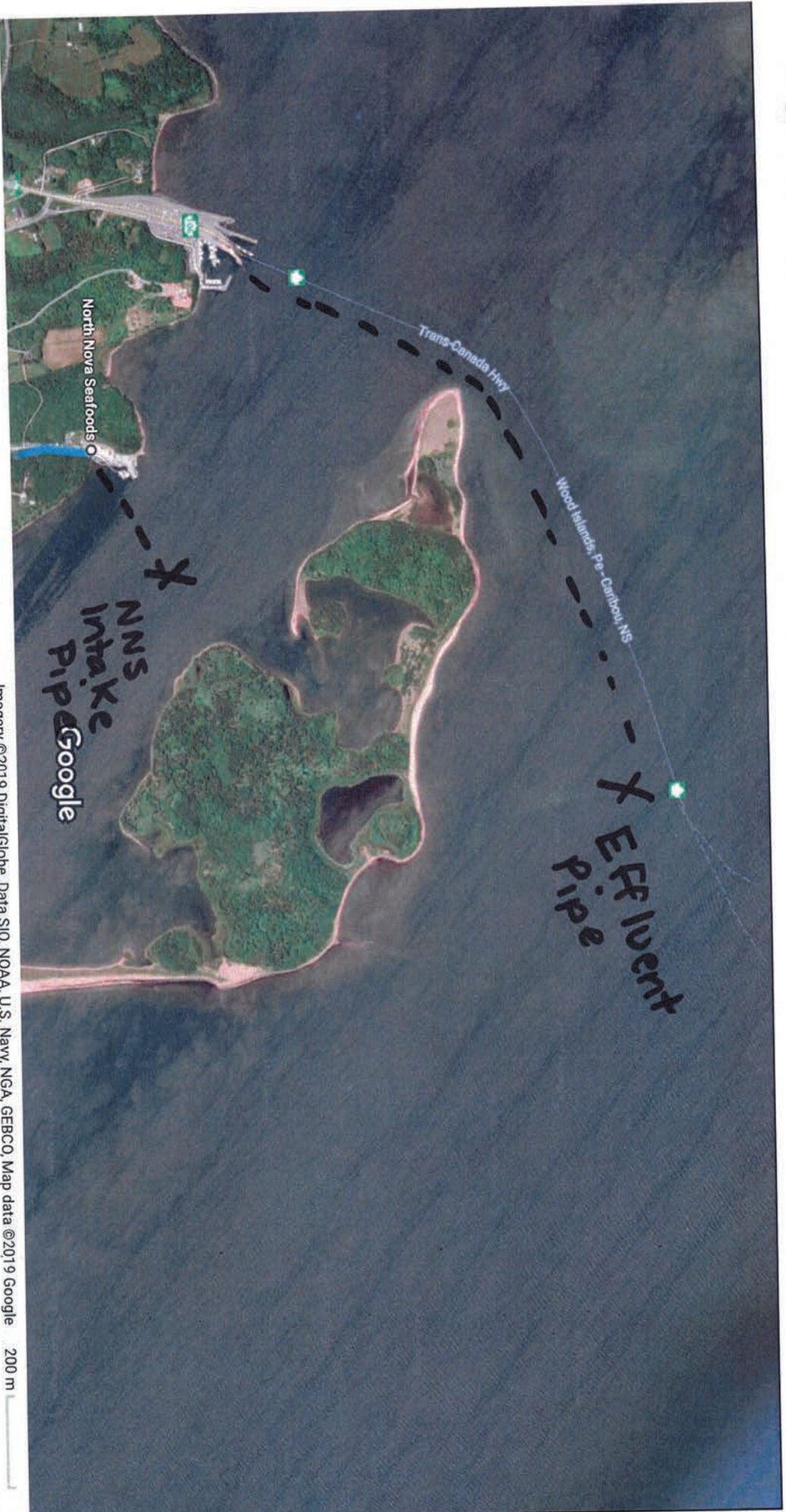
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Sincerely,



From: @petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 1:20:25 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by: @outlook.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 1:33:48 PM

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Thank you.

Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 1:40:13 PM

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Thank you.

Signed by:

@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 2:16:52 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

This community and the surrounding area need these jobs.

The environment is a very important issue however a short extension for the Mill would be a small price to pay in relation to how long it has already been operating.

Signed by:

@unifor2289.ca)

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 2:19:56 PM

Project: replacement_effluent_treatment_facility_project Comments: I disregard with the discharge of Effluent treat or otherwise into the Northumberland Strait . Enviromental damage is irreversible and cannot be justified via political or economic arguements . Name:

Email: @gmail.com Address:

Privacy-Statement: agree x: 50 y: 20

From: @yahoo.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 2:23:12 PM

Project: replacement_effluent_treatment_facility_project Comments: Honourable Margaret Miller, Nova Scotia Environment PO Box 442 Halifax, NS B3J 2P8 Phone: 902-424-3736 Fax: 902 424-1599 Email: minister.environment@novascotia.ca Dear Minister Miller, All the light of reasoning in the shafts of empirical evidence and logic as to why Northern Pulps Environmental Assessment fails is in a thorough and accurate report, which appeared in the Halifax Examiner this week. Google: Northern Pulp's environmental documents: missing mercury, a pulp mill that never was, and oodles of contradictions Im sure youve read this excellent investigation of Northern Pulps effort to convince the province, via your department, of their due diligence. Sorry to say, its doo-doo diligence and smelt it and scooped it up. Its in the trash of corporate obfuscation which I trust you will empty. I will add my passion heat regarding the ownership of Northern Pulp and why we should not allow this company to grow its unethical roots in the land of the Acadian forest, as it unmercifully uproots its contents, so vital to our and other species health and wellbeing, without regard to the ecological nightmare its creating, as it has done in Indonesia in the Borneo Rainforest. Regarding the mills relevance, the labour union rep. at the mill spoke during CBCs Information Morning broadcast from Pictou a month ago about the owners deep pockets. These deep pockets are filled with the blood from his destructive clear-cutting onslaught in the Borneo Rainforest, which obliterated the Penan people, destroyed the orangutans and hundreds of thousands of other floral and faunal habitat to enhance our own billionaires thirst for profit as they fill their processed junk foods with the blood money palm oil that replaced earths lungs thousands of potential cures for dis-ease--including cancer-- that lie in the richest of biological wonders--the rainforest ecosystem and the survival of our closest along with chimpanzees relative species --the orange ape. The owner of Northern Pulp is not doing Nova Scotia any favours in the long run which is getting shorter every year as more clearcutting takes place. You must be a cog in the wheel of convincing the employees of this company that there is support and life after this plant closes. Like the tide, dozens of enterprises in tourism, heritage, fisheries, farming, ecotourism and vital clean corporations will move their families and their operations into Pictou County when they see its health, beauty and sustainability restored by your department. That is your legacy, Minister Miller. Do you want it or not? Northern Pulp's environmental documents: missing mercury, a pulp mill th... Cover photo: Point D, where treated Northern Pulp wastewater currently flows from Boat Harbour into the Northumb... Sincerely,

Freelance Writer

: to over 100 concerned citizens of Nova Scotia Name:

Email: @yahoo.ca Address

Privacy-

Statement: agree x: 73 y: 20

From:
To: [Environment Assessment Web Account; info@friendsofthenorthumberlandstrait.ca](mailto:info@friendsofthenorthumberlandstrait.ca)
Subject: Re:
Date: March 7, 2019 5:09:18 PM
Attachments: [.pdf](#)

I apologize for emailing you again but was hoping I could use the attached .PDF as my submission rather than the one I emailed you at 14:23. The only thing that has been altered is the size of the photo on the first page as it was modified when I originally formatted the .PDF.

Many thanks,

On Thu, Mar 7, 2019 at 2:23 PM

[@gmail.com](#)> wrote:



Honourable Margaret Miller, Minister of Environment
Environmental Assessment Branch, Nova Scotia Environment
P.O. Box 442 Halifax, Nova Scotia B3J 2P8

Minister Miller,



I am contacting you in relation to Northern Pulp's Replacement Effluent Treatment Facility Project. I am addressing you as someone who makes their living in the fishing area 26A in the Gulf of St. Lawrence. These fishing grounds encompass the area of the southeastern part of Northumberland Strait between Nova Scotia and Prince Edward Island and the western half between Prince Edward Island and Cape Breton. Firstly I would like commend each of the members in my community who are addressing the issue in of Northern Pulp's presence on The Northumberland Strait. I have never publicly expressed my feelings regarding the environmental atrocity that is Northern Pulp but cannot go without taking this opportunity to make this personal appeal to you. My community is often regarded as being divided but many have been brought together by their concern over the treatment of our waters & residents. I

could not be prouder to be from Nova Scotia except that our representation is truly failing us by supporting an industry over its own citizens. You have been disregarding the voices of a concerned community. **I urge you to recognize your support of Northern Pulp over the people of this area as the destruction of the cultural heritage of communities along the Northern Shores of Nova Scotia & take commendable action in requiring an environmental assessment report (EAR) to be conducted Canadian Environmental Assessment Agency (CEAA).** Together with the supported of obedient Provincial Governments the pulp mill operation in our community have a continuous track record of negating our community and neglecting our environment. Nova Scotia's culture was formed by our & continues to develop from the interactions within environment of our scenic coastlines. **I demand you address the environmental effect of Northern Pulp's operation on the culture of Northern Nova Scotia by stepping away from the situation & ordering an EAR of the proposed area from the CEAA before any actions can taken in relation to the proposed pipeline.**

I can attest that the culture contained & surrounding the area of the proposed pipeline is boundless compared to the value of the pulp produced at Northern Pulp in Abercrombie, Nova Scotia. I was raised in a 'fishing family' in Pictou County, Nova Scotia; graduating from in Alma from Northumberland Regional High School where I received my first formal education on the injustices related to the area's pulp mill through a law class. At the time my peers & I would get inundated with the presence of sulfur and other pollutants in the air as we learned. I continued my studies at Dalhousie University's School of Nursing learning the significance of social and cultural determinants of health. After attending a lecture on environmental racism I discussed the concept with my Father; while he had never heard the terminology before that he was very much aware of its effects on the coastline. When I developed the Northumberland Strait was the therapeutic entity that sought me through. I could be dead but I'm a fisherman. The Strait taught me how to transition through life; it gifts me with joy, gratitude & some pride in myself. My Father forced me onto the water each morning & into having a purpose. I will never find the words to describe how pushing off of our wharf, spending the day the day on my water & returning home with bounty healed me. I've been vegetarian for fifteen years & I've never eaten a lobster. As a child I watched my Grandfather & Father struggle with daily catches that were in the double digits poundwise. Today we benefit from the environmental effects of a warming planet; there is no better feeling knowing you're top boat & I love seeing my Brother & Grandfather floating as we sail in with catches that are ten times what they were in the early 2000s. I know programs in the area are benefiting us too but we as a society must address the environmental conundrum that is the Northumberland Strait. A decade has passed since I first brought up the environmental racism with my Father yet there is significant distress in the area regarding the multitude of issues caused by Northern Pulp's continued operation. My father has remained a positive example for me by continuously expressing his belief that the conversation regarding these issues must be solution-focused. My sister's partner is a engineer technician at Northern Pulp and my partner works the forestry which is heavily dependent on the funding provided by the pulp and paper industry. As a family I feel like we have done very well by maintaining respectful discussion regarding the operation of Northern Pulp. However I am deeply distressed by the Provincial Government's delinquency in caring for our waters & am now asking you to consider the direct environmental effects on the culture of this area as your personal decision. **I urge you to hand off the responsibilities of an EAR to the CEAA before the situation worsens.**

I make my living on the Northumberland Strait in more than one way. I am a deckhand, working alongside my Brother, Father & paternal Grandfather out of Skinner's Cove in River John, Nova Scotia. Since 2017 I have supplemented my income by working in the tourism industry as a server at The Pictou Lodge; an institution built in 1926 that accommodates those visiting the area. Here I meet people from all over the world who are travel to our beautiful shoreline because of the nature of The Northumberland Strait. Harkening first hand accounts of what Come-From-Aways cull on our shores frames the global perspective on Nova Scotia as a whole. These conversations have defined how fortunate I feel to live & work here; I have a great love for the sea. I assure you that our culture and waters are worth more than pulp. If Northern Pulp

continues to operate alongside a submissive provincial government I know the tourism industry this area has worked to build up will collapse with the environment; No one wants to vacation in a cesspool. **The culture here is informed by the environment which will be affected if you permit Northern Pulp to operate without and EAR conducted by the CEAA.**

My partner & I have both grown up in homes that our Great-Great-Grandfathers had lived in. We have both acquired knowledge informed by a multi-generational relationship with this environment. His family has been farming the shoreline of Caribou Harbour since arriving here from Scotland in the early 1800s. This area is the proposed site of Northern Pulp's pipeline. **I encourage you to think of it as ground zero & your legacy by acknowledging the significant**

cultural value of the Northumberland Strait in handing off responsibility of an EAR to the CEAA. The culture of this area

is indubitably conjoined with commercial fishing which both of our families sustained themselves from. In 1939 my Grandfather was born in a farmhouse very near Skinner's Cove & has been sailing 'The Strait' since childhood. The first vessel he operated was one he had fashioned by welding two car hoods together. He continues to fish

has witnessed the coastal transformation of this area over his lifetime. Fishing beside my Brother, Father and Grandfather gladdens my heart in ways that I cannot express in words. I fear that I am at the end a line and will be unable to pass on my knowledge and skill set to a future generation because my government doesn't value the very environment it exist within. My Grandfather's experience is quintessential to who I am as a person; part

of this experience is how this environment has been altered by the undeniable results of a changing, polluted environment. He recalls bluffs that have eroded, forests that no longer exist & much, much colder waters. I know our commercial fishing operation will be unsustainable if the mill pollutes our beautiful Strait. I am disgusted by the multitudes of wrongdoings by industry & governments alike since the mill began its operation in Abercrombie. **There must be an objective, independent EAR completed by the CEAA of the Northumberland Strait to address the environmental effects of Northern Pulp's operation on the scenic coastline to identifying how these effects will impact the socio-economic conditions on our culture which has significant historic and future value.**



Those of us who live, work & play on The Northumberland Strait can palpate the environmental effects of the unsustainable pulp & paper industry. There is no wonder why. For a short period during the 1970s my Grandfather supported his family by working at Canso Chemicals, the company who made “the caustic” required for the pulp mill. During this time my Grandfather had a continuous cough, skin rash & eye irritation. At that time he sought the opinion of his family physician Dr. Skinner regarding his ailments who told my Grandfather he was insane for working there. My grandfather has always reported to me that he felt helpless and silenced as Canso Chemicals released straight, untreated waste into Pictou Harbour during early morning hours. He left his employment at Canso Chemicals knowing that they waited until children were sleeping in their beds to illegally dump toxic effluent. If you think you know what dangers are present in under Our waters you have no sense of the situation whatsoever. **An EAR of the Northumberland Strait must be conducted by the CEAA to determine the environmental effects of pulp production in Abercrombie before any decisions regarding future production in the area. In vivo veritas.**

By conforming to Northern Pulps demands I ensure you that you will be forever regarded as the executioner of a culture. I know this community & you are unprepared for dealing with the consequences of not handing an EAR to the CEAA. **Take action by washing your hands clean of any decision-making by electing the CEAA to do an EAR at the proposed site.** I assure you that otherwise the Provincial Government will be overloaded: there will be an impassable, occupied causeway. I believe a reasonable answer to having effluent dumped in my workspace is having it tanked & dumped where those responsible for that work. If you expect this community to live & work in effluent I would expect the same from you. **Order an independent EAR conducted by the CEAA or you will be unleashing an inferno of anguish on this community & our culture beyond anything you could possibly conceive of.**

With some hope,

From: @live.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 2:33:13 PM

Project: replacement_effluent_treatment_facility_project Comments: I believe that Northern Pulp should be permitted to put an "on site" effluent treatment plant, and that the effluent should be discharged into the Northumberland Strait via a pipeline / diffuser system. The mill and the fishermen have co-existed for over 50 years, with the mill effluent going into the Northumberland Strait via Boat Harbour. I had an opportunity to visit the Boat Harbour treatment facility about 2000-2001, when it was being managed by . I saw a treatment facility that was well run, meeting all the government guide lines of the day. If the effluent treated on site at the mill, exceeds government guidelines, then it should be allowed to go out in to the strait. No one in the fishing community seems to be in dire straits. They all seem to be driving newer vehicles, and living in nice homes. If you ask a fisherman how the fishing is, they all have the same response "not as good or better than last year" as if the average person knew how well they did last year. If the mill is forced to close because they cannot discharge effluent into the Northumberland Strait, not only the employees at the mill, and all those who supply product to the mill will be affected. I believe the housing market will take a substantial hit, and with that the tax base will be eroded in many areas of Nova Scotia, particularly in Pictou County. This may also lead to a reduction in income earned by many, resulting in lower taxes for the province, which will lead to reduced services in health care, schools and roads, to mention a few. I do not believe tourism will be greatly affected by discharging effluent into the Northumberland Strait. We have a very short tourist season in all of Nova Scotia, and I believe the income generated by tourist is far exceeded by the income generated by the mill. I feel very confident saying 100 of the people who are against the discharge of effluent into the Northumberland Strait are the same people who wipe themselves, in the morning, with a product that has its start in a mill similar to Northern Pulp, so, if they are adamant about changing their lifestyle then they should think about going back to what I used as a child when using the facilities " a page out of an Eaton's catalogue.

Name: Email: @live.ca Address:

:

Privacy-Statement: agree x: 59 y: 19

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 2:38:05 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

I trust all the professional ocean and fishery scientist professionals that work on all of our behalves everyday in Nova Scotia, will do their very best work in resolving any concerning question anyone may have.

Signed by:

@hotmail.com)

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 2:41:35 PM

Project: - Choose - Comments: Just a few questions 1 Was it ever considered to change over from the kraft process to a different process that may be less environmentally damaging? If so how quickly could it have been done and at what cost? 2 Is it possible to dig three parallel sets of 10 holding tanks 30 tanks in all. Each holding tank would be 500 metres wide by 150 metres long by 4 metres deep and contain the daily outflow of effluent. Then the effluent in tank one possibly could be cleaned and sent to tank 2 and so on . By the time it had gone through tank ten or holding area 10 the effluent through filtration, reverse osmosis, aeration, chemical treatment, bacterial treatment and other cleansing processes would it not be fairly clean water and if so then allowed into Northumberland Strait. Perhaps fewer than 10 holding tanks, perhaps 8, would be required. The other two parallel sets of holding areas would be put into use when the first set needs to be cleaned and refurbished. Question 3 Could the waste product garnered after cleaning the holding tanks be safely disposed of? We need to safeguard our environment in a creative way so that SUSTAINABLE fishing, farming and forestry practices can be carried on. Name: Email: @ns.sympatico.ca

Privacy-Statement: agree x: 58 y: 27

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 2:50:42 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

We must not forget our women ...you came from a mother who is a woman .so please let s not betray them..LOVE

Signed by:
@rogers.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 3:16:53 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
@rogers.com)

From: @hotmail.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 3:25:17 PM

Project: replacement_effluent_treatment_facility_project Comments: Please make sure an in-depth assessment is done before this project can go forward, preferably pushing it to a federal level assessment. Ideally, the pipeline will not be able to be installed at all, as Northern Pulp has been harming our community for over fifty years, and to put toxic effluent in the strait would be absolutely detrimental to fisheries, tourism, and the health of many people in Pictou County, NS, and on either side of the Northumberland Strait. People over profit. Environment over industry. We can create clean jobs, it just takes government initiative. We the people have no choice but to put our faith in the provincial government, and you, Margaret Miller. Please don't let us down by polluting our province and choosing the pulp mill over Nova Scotia's citizens as we have seen for so long. Thank you. #nopipe #savethestrail Name:

Email: @hotmail.ca Address: Municipality:

: Privacy-Statement: agree x: 64 y: 26

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 3:28:12 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

I am originally from Pictou N. S. now living in the town of Hinton Ab. Which also has sawmill as well as a pulp mill. I see every day how pulp mill and communities can coexist and high environmental standards up held. There is a balance to this problem that must be found for all involved please let work together and find a solution as we have in Hinton thanks

Signed by:
@hotmail.com)

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 3:33:20 PM

Project: replacement_effluent_treatment_facility_project Comments: March 7, 2019
Honorable Minister Miller, The legislation the current Liberal government introduced last year, Bill C-69, which has passed the House of Commons and is currently with the Canadian Senate, contains important new measures to strengthen environmental protection and Indigenous participation. The current new treatment facility proposal and associated environmental assessment submitted by Northern Pulp would have triggered a Federal Assessment under this new Act. The new treatment facility, which includes a pipeline direct to the Northumberland Strait to dispose of their estimated 62 to 90 million liters of "treated" effluent per day, will cause harm to the marine ecosystem. The triggers that would have directed Northern Pulp's submitted EA to be designated a federal assessment, are inclusive of health, social, economic, gender-based and long-term impacts on Indigenous peoples, when you consider the potential impacts this toxic effluent will have on the Northumberland Strait and the associated fisheries. This includes the health of the people potentially impacted, directly or indirectly via the consumption of contaminated seafood, air emissions specifically PM 2.5, mental health, deleterious substances, dioxins and furans, methyl mercury, etc. Northern Pulps proposal includes burying the effluent pipe 4.1 kilometers beneath the seabed, which is federal land. As Section 67 of current CEAA 2012 Act, sets the framework for the environmental assessment of projects being carried out on federal land that are not considered designated projects and for which a full environmental impact assessment under the Regulations Designating Physical Activities is not required. As the seabed of the Northumberland Strait and Caribou Harbour are federal crown land it is subject to requirements under section 67 of CEAA. Section 67 states as follows: "1. an authority must not carry out a project on federal lands, or exercise any power or perform any duty or function conferred on it under any Act of Parliament other than this Act that could permit a project to be carried out, in whole or in part, on federal lands, unless: a The authority determines that the carrying out of the project is not likely to cause significant adverse environmental effects or b The authority determines that the carrying out of the project is likely to cause significant adverse environmental effects and the Governor in Council decides that those effects are justified in the circumstances under subsection 693." Based on the current CEAA 2012, this project is subject to review by a federal authority in order to determine whether the carrying out of the project will cause significant adverse effects on the surrounding environment, or if any potential significant adverse effects are justifiable. Northern Pulps submitted EA does not include a study on the impact to lobster or herring larvae, or bivalve shellfish including scallops. Also note, requesting a federal assessment are approximately 20 of the Canadian Senate, the government of Prince Edward Island, a working group of 3000 fishermen including Pictou Landing First Nations, all the local MLAs, as well as thousands of concerned citizens including many local physicians. You obviously are aware of the conflict of interest our provincial government has, as the government is both the funder either directly or indirectly, and regulator. Our provincial government remains liable for damages caused by this effluent, including the inevitable damage this new effluent treatment proposal will cause. The damages to Boat Harbour, as well as the impounded western section of the Pictou Harbour, caused by the Pictou Causeway, built to encourage the mill to come here, will amount to many hundreds of millions to remedy. This new proposal and associated damage it may affect on the fisheries, of not just Nova Scotia, but New Brunswick and P.E.I. as well, could potentially amount to billions. If Northern Pulp is so confident in their new treatment

facility, I wonder if they would consider assuming the risk and associated cost to compensate the fishermen of three provinces, in the event the effluent does what fishermen expect it to do? Considering Northern Pulp has not performed any actual lobster or herring larvae studies and have no idea as it pertains to the detrimental impact the effluent will have regarding bio accumulative effects on the numerous bivalve shellfish, finfish, lobster, crab, or any of the associated species larvae. Please designate this for a federal review. Name:

Email: @eastlink.ca Address:

Privacy-Statement:

agree x: 65 y: 22

From:
To: [Environment Assessment Web Account](#)
Subject: Federal Assessment Submission
Date: March 7, 2019 4:01:53 PM
Attachments: [Fed. Assessment Letter.pdf](#)

This email and any attached files are confidential and intended solely for the intended recipient(s). If you are not the named recipient you should not read, distribute, copy or alter this email. Any views or opinions expressed in this email are those of the author and do not represent those of the company from which this email is being sent from. Warning: Although precautions have been taken to make sure no viruses are present in this email, the company cannot accept responsibility for any loss or damage that arise from the use of this email or attachments.

March 7, 2019

The Hon. Margaret Miller
Minister of Environment

Dear Minister Miller:

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project.

My name is [redacted]. I grew up in the Town of Pictou and now live on the Sunrise Trail along the beautiful Northumberland Strait for almost 34 years.

When the pulp mill first started production I was only 10 or 11 years old and the smell from the mill was almost unbearable. I can remember gagging all the time because the smell was so bad and so strong it took my breath away and it has not improved much over the years. When I was a teenager I used to go swimming at Lowden's Beach which was located directly across from the Lighthouse Beach in Pictou Landing. Lowden's Beach was a beautiful beach at that time but it was not long before the dark scum from Boat Harbour ruined the beach. The mill still has that awful smell and numerous visitors have not stayed or will not stay in Pictou because of the smell. This drives people away from this area and hurts the tourism industry.

Pictou County is an area that has a beautiful shoreline with many beaches that locals and cottagers enjoy during the summer months. I have noticed that the Northumberland shore has changed over the last 34 years. The waves and tides are much higher than they used to be and the winds are changing by getting stronger. I have seen winter sea ice buildup on the shore numerous times over the years where it has moved huge rocks. We should not underestimate the power behind these ice flows that are so strong. The forces of Mother Nature should not be taken lightly because the weather is something we cannot control.

I refer to the Nova Scotia Environment Act because it is important to note this project will cause **adverse effects or significant environment effects**. It will create negative effects on the environment that cannot be remedied. In Northern Pulp's Environmental Assessment Registration Document it states,

"At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentration) will not be known with certainty until the project is operational. Due to uncertainty regarding effluent composition and approximate concentrations of substances present in the future treated effluent (which will not be verified until the project is operational), the identified candidate COPC's in effluent are considered preliminary at this time." (Consulting, January 2019)

This is unacceptable and clearly not a reality because we now have an unknown variable that we are supposed to believe will have no effect on our environment and the Northumberland Strait's ecosystem. It will not only effect people livelihoods but most importantly the environment. Northern Pulp does not know if the effluent can be remedied and once the process starts it will continue until a time they no longer require a pipe in

the Northumberland Strait. It is hard to fathom that Northern Pulp thinks the residents of Pictou County truly believe the environment will not be harmed. It will be too late to worry about the eco-systems, the fisheries and tourism that will all suffer because of such a poorly executed project. To expect the residents to put their trust and faith in such an unconceivable plan that Northern Pulp is going to run a pipe out into the Northumberland Strait right through the center of a marine ecosystem is beyond comprehension. I cannot even think of any words that would express the negative impact this will cause to the environment and to sacrifice the environment for industry is just morally wrong.

Northern Pulp has also provided the same data specific to the Pictou Harbour project on the Caribou Harbour project. There is no data provided on long term effects from the effluent flowing into Caribou Harbour and Northern Pulp did not hold public consultations for the Caribou Harbour Project. We do not know the impact this project will have on the tourism industry but the fishery is definitely understated by Northern Pulp **assuming** there will be no effect or **highly unlikely** there will be no effects.

I cannot stress enough the importance of local knowledge from the residents who have lived with the pulp mill in their neighborhood for over 50 years. PLFN has been living with this toxic waste in their backyard so they know more than anyone what it has done to the fish and wildlife they have hunted over the years. All you have to do is ask the fishermen who have been fishing on the Northumberland Strait for hundreds of years with fishing gears passed down through the generations. They know these waters and the ecosystems that are vitally important to the marine environment and the fishermen who fish these waters. The fishing industry provides economic growth and sustainability to Pictou County and we cannot overlook the forest industry that has to start sustaining our forests for the future or there will no nothing left to harvest. It only took 1 cow to cripple the beef industry in Canada so we do not want a repeat in the fishing industry. The fishermen pride themselves on the Atlantic Lobster Fishery so I cannot imagine putting a pipe out into the Northumberland Strait for Northern Pulp's effluent would even be considered.

A statement from the project's Executive Summary as follow:

"It is not predicted that the installation of the pipeline will result in long term harm to fish or fish habitat. " (Baxter)

The consultants for Northern Pulp went so far as to find a project similar to the Northern Pulp project. In Joan Baxter's article in the Halifax Examiner she states:

"The consultants looked for a project that was similar to the NPNS project, which had undergone a human health risk assessment, so they could compare the potential human exposures and risks associated with a marine treated effluent discharge from a kraft pulp mill.

For this Northern Pulp chose a study done by Toxikos Consultants in 2006 for a highly controversial pulp mill proposed for Bell Bay, Tasmania. It would be impossible to check the veracity of the study because the mill was never built." (Baxter)

Northern Pulp had 5 years to come up with a plan when Boat Harbour closes in January, 2020 but the community only has 30 days to make a response to a document with so many pages to comprehend.

It is very troublesome that Northern Pulp's pipe route is going through the Town of Pictou's watershed. If there is ever a leak that effluent is going directly into the water source for a town. Northern Pulp's latest leak in 2018 was found by residents whose property borders the Boat Harbour system and there has been no information available on the effects or how much of the effluent was leaked before it was found.

The residents of Nova Scotia have been paying for this environmental disaster for over 50 years and the time has now come for it to end. The taxpayers of Nova Scotia have spent hundreds of millions of dollars on this pulp mill and we deserve better than the 50+ years of toxic waste.

Lastly the treatment of the PLFN from previous and present owners of Northern Pulp is truly heartbreaking. How do you right a wrong after years of environmental abuse and the lies the PLFN were told before the mill was even built and continued throughout the course of over 50 years? Boat Harbour is situated in the PLFN backyard and it has been used as a dumping ground for far too long. The Pictou Landing First Nation's countdown clock is ticking because there will be no extension and Boat Harbour is going to close on January 31, 2020.

In conclusion the only acceptable option is to move forward with a Federal Assessment. Trust is such a small word that had many consequences in regards to the pulp mill in Pictou County. Assumptions and predictions do not qualify for a Class 1 Assessment.

Regards,

From: noreply@infogrove.com
To: [Environment Assessment Web Account](#)
Cc: [@gmail.com](#)
Subject: Support for Northern Pulp Environmental Assessment
Date: March 7, 2019 4:04:30 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 4:16:40 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@hotmail.com)

NB

From: @spda.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 4:24:13 PM

Project: replacement_effluent_treatment_facility_project Comments: This application should be rejected for the following reasons:
Partially treated effluent is not acceptable for the otherwise pristine waters of the Northumberland Strait. The present effluent from Boat Harbour is already beyond acceptable, and I understand that the suspended solids in the proposed effluent will be even higher than the present Boat Harbour situation.
Pumping partially treated effluent into the Northumberland Strait has the potential of contaminating the waters of five of Canada's provinces.
The fisheries at stake in these five provinces are too valuable to be put at risk. Name: Email: @spda.ca Address:

Privacy-Statement: agree x: 62 y: 18

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 4:30:05 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by: _____
(_____
@gmail.com)

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 4:35:15 PM

Project: replacement_effluent_treatment_facility_project Comments: I wish to congratulate Margaret on not agreeing to a proper well informed environment assessment. Also for discouraging the federal CEAA what do they know Best of luck Name: Email: @gmail.com Address:

: Privacy-Statement: agree x:

68 y: 25

From: noreply@infogrove.com
To: [Environment Assessment Web Account](#)
Subject: Support for Northern Pulp Environmental Assessment
Date: March 7, 2019 4:42:33 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Replacement Effluent Treatment Facility Project
Date: March 7, 2019 4:46:03 PM

March 7, 2019

To Environment Minister Margaret Miller

I would like to voice my *strong opposition to the Northern Pulp's proposed replacement effluent treatment facility project*, which will pump 85 million litres of hot toxic pulp effluent daily through pipeline across sensitive watersheds, directly out into the Northumberland Strait, one of Nova Scotia's most important lobster and fishing/breeding grounds. This area is also important for recreation, and tourism, with beautiful coastlines with gorgeous beaches.

As a cottage owner in Pictou County for over 20 years, I am being asked to trust that the research has been exhaustive, and thorough, and that I have nothing to worry about based on a company with a dismal track record. Dillon Consultings' 'executive summary' of the Environmental Assessment report developed on behalf of Northern Pulp, indicates that not one single item within the submission would have any significant 'Residual Environmental Effect Predicted'. Not one out of 18 areas affected (including marine habitat, ground water, wildlife, plant life...etc) will have any residual effect; including no effect during construction, no effect during ongoing operation, no effect during ongoing maintenance, no effect during accidents, no affect during malfunctions, no affect during unplanned events! Sounds a bit unbelievable. Take a look, or a smell of Boat Harbour, an environmental racism disaster.

What exactly will be coming out of the pipe and dumping into the Northumberland Strait? How can we possibly know, when they don't even know. The Dillon EA report referred to above has the following statement:

'At this time, effluent chemistry characteristics including the specific substances present in the treated effluent and their anticipated concentrations will not be known with certainty until the project is operational'

This statement is not comforting.

What we do know according to "Appendix E", is the 85 million litres a day of treated effluent will be up to 37 degrees C in the summer and 25 degrees C in winter. This is a problem in a lobster and fishing breeding ground. The fresh water, and the warmth of the water effect lobster habitat. What is its affect on fish, shellfish and birds? This area has a large and diverse number of birds that depend on a healthy environment.

The past handling of effluent from this mill has resulted in one of the most contaminated sites in Canada, Boat Harbour. I want to see a strong, science based review of this project which will protect the future health of our Strait and it's inhabitants, both great and small. The economy of Nova Scotia depends on healthy waters and quality seafood.

I am also concerned regarding the bio-solids that are removed as part of the treatment system. According to Guy Martin, the principle consultant with KSH Consulting in Montreal and lead engineer for the design in the construction of the waste water treatment plant for Northern Pulp," the solids that are lost within the production and the bio-solids that are removed as part of the treatment system, those will be pressed and the current plan is to use them as fuel in the mills part boiler."

We need to know that all mercury, will be removed before burning because of how harmful inhalation of mercury vapour is. Mercury vapour can produce harm on the nervous, and immune systems. Damage by mercury to the lungs can prove fatal.

I also believe there is a conflict of interest happening here. The Canadian government has put up millions of dollars into this company. How can this project be looked at objectively? Perhaps the environmental assessment should be handed over to the Canadian Environmental Assessment Agency

Additional information is required before any decisions can be made on Northern Pulp's proposal. Please give Pictou County a chance to thrive with clean air and clean water.

Regards,

From: noreply@infogrove.com
To: [Environment Assessment Web Account](#)
Cc: [@rogers.com](#)
Subject: Support for Northern Pulp Environmental Assessment
Date: March 7, 2019 4:49:03 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 5:05:01 PM

Project: replacement_effluent_treatment_facility_project Comments: Madam Minister: I write today to express my disgust with your ministry even remotely considering allowing Northern Pulp to proceed with their recently registered proposal to relocate their Effluent dumping site from Boat Harbour to the Pristine waters of the Northumberland Strait. This proposal will pass through Caribou Harbour where my wife and I live in what we believed would be our retirement home which we purchased in . At that time we had no advance warning that we would have to face the threat of having to deal with the negative impact of living on the waters that will be polluted with potentially hazardous chemical and solid waste effluent being disposed of directly into the waters that our condominium fronts on. These are tidal waters and are subject to significant storm surge which brings sediment up from the bottom and will wash ashore onto the land where our condo was built. A total of 31 other condos, the majority of which are owned by seniors will also be impacted as will the beaches of Caribou Monroes Island Provincial Park. The land upon which a total of 32 ground level condos are located is a waterlot Grant meaning that the Condo property extends out into Caribou harbour and must be recognized as Private property. Neither the Government of Nova Scotia nor Northern Pulp have a legal right to cause harm to private property. Like a majority of the condo shareholders in this project, we are seniors who may well be forced to proceed with legal action to protect our homes.

The properties here will also likely see diminished value as a result of the aforementioned proposal. PM TRUDEAUS recent remarks saying that the Nova Scotia Government has the lead with respect to this matter suggest our only hope to save our homes lies with you and your government. I appeal to your sense of fairness and justice in making your final decision on the outcome of your deliberations. The people of Pictou County have had to live with this pollution producing company ever since it began operations some 50 years ago. Enough already. As for the job loss factor, your Government showed no such concern when the Trenton works facility was shut down however, that shutdown put more employees out of work than the mill shutdown will impact. The forestry industry can be repurposed to produce valuable products without the associated pollution. I note that the Boat Harbour Remediation project will cost NS taxpayers \$217 million, however, it is unlikely that the Northumberland Strait could be similarly remedied. If the Northumberland Proposal is approved, it will totally negate the Northumberland Coastal Restoration project which I believe is also Government funded. Waste, waste and more waste ought to be the Liberal campaign slogan in the upcoming provincial election which your government has little to no hope of winning should it approve the Northern Pulp proposal. It appears your government has more interest in protecting the interests of foreign investors than it does the citizens who vote you into power. Any counter argument respecting job losses can be offset by job creation that would arise from repurposing the Nova Scotia Forestry industry, or redirect the provinces pulp wood supply to the Port Hawkesbury mill which is currently experiencing shortages of raw materials. Madam Minister If I inadvertently drop a kleenex onto the streets of any community I would most likely be charged and convicted of littering. Yet your government is considering allowing a profit motivated Foreign Company to pollute the waters of the Northumberland Strait with what could be the equivalent of quadrillion of kleenex and chemical waste into the waters along its coastlines in both PEI AND Nova Scotia. The results of the CEAA assessment of the Boat Harbour remedial project will demonstrate clearly the potential environmental disaster Northern Pulp's proposal and your failure to protect our environment could cause. It is my belief

that you ought to wait upon the findings of CEAA's assessment at Boat Harbour prior to granting Northern Pulp Authorization to proceed with their outrageous proposal. You have the power to prevent this disaster. Exercise that power. Respectfully submitted,
Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 78 y: 33

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 5:11:02 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@outlook.com)

ON

From:

To: [Environment Assessment Web Account](#)

Date: March 7, 2019 5:39:34 PM

In regards to northern pulps plan to pipe effluent into the Northumberland strait, I think this plan should be stopped, this day and age we should be moving to more green environment friendly ways to conduct business, we should not leave a environment disaster for our children, the risk to our water our fisheries and our air we breathe is to important to risk with this plan. The ice in the Northumberland strait would destroy this pipe, and monitoring of what comes out of pipe would have to be done daily and if test results are bad ,then it's to late the damage is done our ecosystem will already be destroyed much like boat harbour. Also the plan to burn soilds in there boilers is akin to environmental terrorism that the people of this area should not have to endure, also the way this plan was put in place was very divisive for pictou county, pitting family against family, neighbors versus neighbors, its time this government came up with plan to help the people of pictou county and this pipeline into our ocean playground is not the answer. Please help stop the environmental terrorism that the people of pictou county have to endure. This plan should undergo the highest level of scrutiny possible to help alleviate the concern that so many people have that have endured this crisis for over 50years, please help pictou county stand up to this foreign owned company that has been treating its neighbors with disdain. Whether it costs a billion dollars or more the only answer is build a closed loop system that will not pollute our waterways with a toxic waste water pipeline into our oceans. Thank you,

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 5:41:07 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

I ask that you sit down and discuss this issue, and allow the voice of workers' unions to influence your decision. Uni-for is a contentious and rank and file union. They deserve a seat at the table to deliberate these important sustainability issues.

Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 5:41:46 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@hotmail.com)

From: noreply@infogrove.com
To: [Environment Assessment Web Account](#)
Subject: Support for Northern Pulp Environmental Assessment
Date: March 7, 2019 5:44:50 PM

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Thank you.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 5:46:13 PM

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Thank you.

Signed by:
@eastlink.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 5:49:42 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:
@hotmail.com)

From: @eande.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 5:52:02 PM

Project: replacement_effluent_treatment_facility_project Comments: All toxic effluent must be treated and neutralized before it is discharged into either Boat Harbour or further out in the Northumberland Strait. The sea around us is not a garbage dump. It must be a healthy environment in which untold living species can continue to survive and not be poisoned by industrial production waste. Name: Email: @eande.ca Address:

Privacy-Statement: agree x: 45 y: 25

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 5:54:19 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Our forest industry is vital for positive growth in Nova Scotia and to achieve this we need to have a positive path forward and without Northern Pulp continuing to operate I don't think it would be achievable. I am in full support of Northern Pulp to keep operating with a new Effluent Treatment system. Thank you

Signed by:
@gmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 6:16:02 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

@live.com

Signed by: @live.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 6:22:01 PM

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Thank you.

Signed by:
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 6:22:44 PM

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Signed by:
NS @msn.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 6:23:17 PM

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Signed by:

@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 6:34:41 PM

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Thank you.

Signed by:

@eastlink.ca)

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 6:43:01 PM

Project: replacement_effluent_treatment_facility_project Comments: I dont know how you can even begin to consider this project. Out biggest, most natural beauty is not a dumping ground for effluent. do you want to eat food that comes from the strait once you start this process? I dont care how careful you are, accidents happen. this facility could ruin the livelihood of thousands of tax paying people at the very least. The damage to sea creatures is unimaginable when I think about leakage into the strait. there has got to be a better way.

Name: Email: @ns.sympatico.ca Address: Municipality:
: Privacy-Statement:

agree x: 44 y: 22

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 6:46:37 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

@me.com

Signed by:
@me.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 7:04:36 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by: @execulink.com)

ON

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: Soutien à l'évaluation environnementale de Northern Pulp
Date: March 7, 2019 7:19:44 PM

Je vous écris pour appuyer la demande d'évaluation environnementale présentée par Northern Pulp pour sa nouvelle installation de traitement.

On a beaucoup parlé de Northern Pulp et de ses répercussions sur la collectivité locale. Je suis d'accord avec beaucoup de gens, y compris Unifor, pour dire que Boat Harbour doit être fermé et nettoyé pour respecter les Premières Nations de Pictou Landing et leurs terres. Je sais aussi qu'il y a beaucoup d'avantages à avoir 300 emplois bien rémunérés à Pictou et à soutenir des milliers d'autres en Nouvelle-Écosse, particulièrement dans les collectivités rurales.

La Loi sur l'environnement de la Nouvelle-Écosse est reconnue comme une loi essentielle conçue pour protéger notre environnement commun et guider notre développement économique. La Loi énonce à juste titre son objet au moyen d'un ensemble de principes de développement durable qui devraient guider son application, notamment :

-----> Le lien entre les questions économiques et environnementales, en reconnaissant que la prospérité économique à long terme dépend d'une saine gestion environnementale et qu'une protection efficace de l'environnement dépend d'une économie forte.

Dans cette situation, la science devrait déterminer la meilleure voie à suivre. La Nouvelle-Écosse, tout comme le reste du Canada, possède l'une des normes mondiales les plus élevées en matière de gérance environnementale dans le secteur forestier.

Le travail du gouvernement et de chaque personne que nous élisons pour nous représenter au gouvernement consiste à trouver la meilleure voie à suivre lorsqu'il y a de nombreux intérêts concurrents et parfois opposés. Les collectivités d'un bout à l'autre du Canada parviennent à trouver un juste équilibre où de bons emplois dans les usines coexistent avec une industrie de la pêche et des collectivités prospères.

Nous pouvons et nous devons trouver cet équilibre pour Pictou. Il y a beaucoup en jeu. Des emplois. L'environnement et le respect des Premières Nations. Nous pouvons et nous devons trouver une solution qui soutient les trois.

Merci.

Signé par :

@unifor.org)

QC

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 7:22:39 PM

Project: replacement_effluent_treatment_facility_project Comments: I believe that the following comments stated in para 3 of section 9.1 of the companys registration documentsum up the reasons why this project should not be given approval: At this time, effluent chemistry characteristics including the specific substances present in treated effluent and their anticipated concentrations will not be known with certainty until the project is operational. How can a project of this magnitude be allowed to proceed when the company does not even know what items will be contained in its effluent? The proposed area where the effluent will be discharged is very sensitive. It is an important fishing and recreational area. If something detrimental were to result from the emissions, it would devastate the areas environment, along with its fishery and tourism economy. This project is far too important to be looked at under this quickie assessment. I believe it should be rejected out-right, or at the very least a more in-depth environmental assessment report be conducted. When I was a student in an environmental science course, I wrote a paper about the devastating effects caused by the Sydney Steel Plant dumping toxins into the infamous Sydney Tar Ponds. I implore you to do everything in your power to prevent a future student from writing the same type of report about Northern Pulps emissions into the Canso Strait. Thank you. Name:

Email: @gmail.com Address:

: Privacy-

Statement: agree x: 58 y: 24

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 8:00:47 PM

Project: replacement_effluent_treatment_facility_project Comments: I recently submitted comments expressing my opposition to this project. In those comments I mistakenly identified Canso Strait as the area in which the proposed pipeline is to be located. Of course the identified area is in fact the Northumberland Strait. I sincerely regret and apologize for this error. Thank you! Name:

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 7:40:33 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

@gmail.com)

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 7:46:58 PM

Project: replacement_effluent_treatment_facility_project Comments: Nova Scotia Environment, I am writing to express my disapproval of the Replacement Effluent Treatment Facility Project proposed by Northern Pulp, a foreign owned company globally recognized for their environmental exploitation. Because of the mills history and that of its owners, I urge this agency to be skeptical of assertions made in the proposal. Northern Pulp has made public their desire to continue operating the mill only where it is economical. The potential environmental exposure to the harmful contaminants of the effluent, the impact on a commercial fishery that contributes multiples more in jobs and dollars to the province than the pulp mill, and ultimately the impact on the health of the population in the region are all areas which cannot be appropriately addressed scientifically on an only if it is economical basis. These are real concerns effecting tens of thousands of people where the science indicating no harm will be done has to be beyond questioning as there is no way to reverse the environmental impact of this project after it has commenced. With 5 years advance notice to close Boat Harbour, Northern Pulp was given a significant lead time to satisfy the concerns of stakeholders in this project. Yet they chose not to perform conclusive and evidence based scientific research, such as exposing those species in the Northumberland Strait of concern to fisherman to effluent in a fish toxicity test or assessing the impact of cumulative exposure to diluted concentrations. The reason they have not performed these inexpensive and transparent tests is because the science does not support them. This is also the fish toxicity test they so frequently cite as an acknowledgement of their environmental responsibility. The reality is that the regulations to which they are subjected have not developed at a rate comparable to the level of environmental awareness of the citizens of Nova Scotia. An effluent test allowing 49 of fish subject to the effluent to die is in no way an environmental regulation, but an industry negotiated threshold acknowledging that they cannot operate profitably by treating the effluent to a better concentration. This agency is tasked with protecting the environment and I expect it to do so by denying this proposal. Finally, I believe the provincial government has failed to acknowledge that the Northumberland Strait is regulated under the Fisheries Act and is therefore federal jurisdiction. I believe anything short of a federal environmental assessment on this project, as was done on past proposals submitted by the mill, would be insufficient and could only be attributed to the common belief that there is no way this project would pass a federal environmental assessment. I kindly request that this project be recommended for a federal assessment. Thank you for hearing my concerns. Name: _____ Email: _____
@gmail.com Address: _____

: Privacy-Statement: agree x:

From: @live.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 8:07:13 PM

Project: replacement_effluent_treatment_facility_project Comments: My concerns are the unaccountable loss of several tons of mercury in the 1970s near PLFN. There was an estimated loss of 10-15 tons over a 10-year period Montreal Gazette archives. The peak was 5 tons of mercury in 1975 Canada Press 1977. In my opinion, we are tempting fate with this amount of Methyl Mercury in the ground. JIF Consulting has found 3 areas of mercury in the groundwater surrounding Pictou Landing. Methyl Mercury bio-accumulates in seafood. Humans who consume seafood that contains Methyl Mercury can develop Minamata disease. This is a devastating disease that was first encountered in Minamata Bay in Japan where humans developed this disorder after consumption of toxic seafood. There is no treatment for this disease. Pregnant mothers transfer this Methyl Mercury to the placenta and in turn to the developing fetus causing severe brain damage. In Canada, we have had Minamata disease diagnosed in Ontario, at the Grassy Narrows and White Dog First Nations communities. This developed after Dryden Pulp and Paper spilled 10 tons of mercury into their river. Pumping toxic effluent directly into the Northumberland Strait is not an acceptable alternative for all the above reasons. The effluent will not be toxin free no matter how it is treated and will bio-accumulate in bi-valves mussels, scallops, oysters and lobsters. Seafood will be contaminated. The archaic expression dilution is the solution to pollution is no longer acceptable. Humans are at risk! We have the most pristine cold waters. In 2017 the value of our seafood exports was \$2.0 billion. Infrastructure at Halifax Stanfield Airport has begun to increase with holding areas for lobster and with 3-5 air cargo shipments to China per week, as well as lights to Seoul, Korea. Why would we want to put this at risk? In 2013 the WHO declared PM 2.5 carcinogenic to humans. Once in the air it can stay in the air for days to weeks and it can travel hundreds to thousands of miles. The new precipitator installed on the recovery boiler addresses a percentage of the PM2.5. The main boiler has no precipitator, but has scrubbers. These mechanisms require constant maintenance to operate with high efficiency. The results of the operating efficiency should be transparent and made public and tested more frequently. We are concerned about our local lumber industry and how they would be forced to adapt if The Mill ceases to operate. The lumber industry will change in the upcoming year when the new laws will be enacted regarding sustainable forestry practices. It will be a reshaping of the lumber and forestry Industry and these industries will need direction and support from the community and the federal government. It is never Wealth over Health it is always Health over Wealth. This information has been exposed over and over again. Fifty years of environmental racism is shameful and it is time to resolve this issue. Honour the Boat Harbour act. We need a Federal Assessment, not just a Provincial assessment. No more extensions. People's Health and High Quality standards of environmental protection should be our goal. We have to live with Industry. We don't have to live with industry that pollutes. Northern Pulp doesn't know what is in their effluent and there are just too many unknowns to accept the consequences. Name: Email: @live.ca Address:

: Privacy-Statement: agree x: 65 y: 24

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 8:12:09 PM

Project: replacement_effluent_treatment_facility_project Comments: Appendix-J1-1 page 2.18
under Crustacea refers to American Lobster . Caribou area lobster are Cold Water Lobster and
are less heat tolerant than the American lobster . Numerous studies clearly refer to the
diference . Name: Email: @gmail.com Address:

: Privacy-Statement: agree x: 45 y: 14

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 7, 2019 8:15:44 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@gmail.com)

From: @icloud.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 8:27:41 PM

Project: replacement_effluent_treatment_facility_project Comments: I am so concerned that if this project gets the go ahead the Northumberland Straight will be polluted. Presently weâ?Tre trying to educate ourselves, including the school population about environmental hazards so this threat to the beautiful waters bordering Nova Scotia and Prince Edward Island is critical. Please choose to keep our water and shores safe for sea life and humans for generations to come. Name: Email: @icloud.com Address:

Privacy-Statement: agree x: 55 y: 20

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 8:27:54 PM

Project: replacement_effluent_treatment_facility_project Comments: Nova Scotia is shooting itself in the foot economically by pandering to private companies and treating home based business fishing and forests as disposable. Northern Pulp should not be part of our future. We have an opportunity to lead the country in environmental standards and innovations. Start now by banning the pipe. Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 57 y: 20

From:
To: [Environment Assessment Web Account](#)
Subject: Replacement Effluent Treatment Facility Project
Date: March 7, 2019 8:27:54 PM
Attachments: [2014 Larvae experiment.docx](#)
[letter from](#) [, UPEI.docx](#)
[letter from Dillon.docx](#)

As a citizen in Pictou I am writing to express my concern with the idea of pumping treated effluent into the Northumberland Straight.

For the last 14 years I have been Pictou Lobster Stock Enhancement Research Project run by the Northumberland Fisheries Museum. The hatchery was commissioned in 2004 primarily to attempt to repopulate the lobster stock in LFA 26a located outside Pictou harbour where the stock level had severely dropped. This drop coincided with the years that the pulp mill effluent pipe in Pictou Harbour was leaking effluent.

Following the break in the effluent pipe from the mill in 2014 I conducted an experiment to see the effect on lobster larvae. (see attache file: 2014 Larvae experiment.doc)
As you will see, the conclusion at the end of the experiment was 100% stagnation in growth. This would lead to death on a stage I larvae.

In January 2018 I read comments in favor of the Northern Pulp plan from a

As he was shown as an expert, I sent him my experiment data and received the attached file.(letter from _____). As you will read he had no knowledge with lobster larvae and his final comment is: **I would encourage pressing the mill for increased testing on this basis. This should be done with graded concentrations of effluent, along with modeling of the effluent plume to truly assess the risk.**

Following this I sent my concern to Northern pulp and Dillon Consultants. In April I received the attached reply (see attached letter from Dillon) where I was lead to believe this would be checked out.

Thank you for submitting your lobster larvae experiment. As a part of the Environmental Assessment process, industry experts have been hired at each stage of the process, with the understanding that Northern Pulp wants to find a path forward that protects the environment while also allowing for the mill to continue operations.

I have not been able to find where any further studies have been done or that the effect of effluent of lobster larvae has been taken into consideration.

As you can see from my experiment, our pulp mill effluent posses a sufficient risk to lobsters by the high morality of larvae. This need further study and must be taken into account prior to any approval of the project.

Thank you for the opportunity to express my concerns.

LARVAE EXPERIMENT 2014,

LSERP

- Experiment:** Effects of effluent collected from tidal pond on Pictou Landing shoreline following the break in the effluent pipe from Northern Pulp.
- Date:** Summer 2014
- Location:** Pictou Lobster Hatchery
- Conducted by:** , director, and a summer student,
- Method:** Two conical 25-liter tanks were filled with 21 liters of hatchery sea water from Pictou harbour.
- Each tank 1 and 2 were aeriated to maintain oxygen levels.
- Water temperature of each tank maintained between 19 and 21 C
- 250 ml of collected effluent was added to tank 1. It is noted that effluent was collected in shoreline pond following one tide change, concentration was not tested.
- 20 lobster larvae, 3 to 8 hours old stage I, where added to each tank.
- Small amount of live brine shrimp added each day for nutrient.
- Observations:** Day 1- to 3, all larvae in both tanks swimming and look well.
- Day 4- tanks 2 larvae showing signs of molting. Tank 1- no change.
- Day 5- tank 2- most larvae at stage II but numbers at 18. Tank 1 uneaten brine shrimp indicated larvae not eating
- Day 7- tank 2 numbers down to 15
- Day 14- Tank 2 numbers down to 10 mostly at what appeared to be stage III.
- Day 21- Tank 2 numbers at 4 stage IV, Tank 1 still had 20 larvae at stage I.
- Experiment was stopped after 28 days after no change in either tank.
- Conclusions:** Diluted effluent did not kill lobster larvae in 4 weeks, however they did not develop but stagnated at the stage I with zero growth which would lead to 100% mortality.

April 3, 2018

@hotmail.com

**Northern Pulp Nova Scotia, Effluent Treatment Facility Replacement
Project Update**

Dear

Thank you for engaging with the Environmental Assessment (EA) study for Northern Pulp's replacement Effluent Treatment Facility. The feedback we receive during the EA study process is important and will continue to guide the environmental planning for the project.

Responses to Your Comment

Lobster Larvae Experiment

Thank you for submitting your lobster larvae experiment. As a part of the Environmental Assessment process, industry experts have been hired at each stage of the process, with the understanding that Northern Pulp wants to find a path forward that protects the environment while also allowing for the mill to continue operations. Expertise has been sought in engineering and environmental sciences. The findings you have provided have been passed on to the team for their consideration. Please note that the experiment as described was conducted on untreated effluent from a pond that was not tested for concentration of parameters. This is not a direct comparison to the impacts that treated effluent will have on lobster larvae. Under Pulp and Paper Effluent Regulations, effluent must be treated before discharge to ensure fish are not harmed. In the future, the effluent pipe from Northern Pulp will carry treated effluent whereas now the pipeline carries untreated effluent. We do appreciate you sharing your findings, and ask that you share any other information you believe will be relevant to the EA.

Sharing Information

In Spring 2018 we will return to the community with another series of Open House sessions which will provide answers to questions raised during the initial phase of engagement and present the recommended environmental plans and seek feedback. Indigenous community and stakeholder engagement will also be ongoing through the next phase of the project.

If you have further questions or comments, please contact the project team at npls.effluenttreatmentfacility@dillon.ca, 1-877-635-8553 x 5050 and/or visit the

From: @upei.ca>
Sent: January 21, 2018 12:09 AM
To:
Subject: Re: Pictou pulp mill

Thank you for sharing this with me, I find the results very interesting. Little or no research has been done with lobster and pulp mill effluent. We are doing some research with some locally used pesticides and lobster in collaboration with homarus and even with common pesticides, this is the first American lobster data available. They are not the easiest critters to work with.

Please understand that I based my comments on what we know from 30 years of pulp and paper research, assuming the mill would meet the effluent quality standards that are possible with advanced biological treatment, and that the dilution of the effluent in an area with the highest tidal exchange in the strait is likely to be great. I qualified to the reporter that I felt it was valid to have concerns, and if those concerns or great, which they are, most testing and information should be required before going ahead. But one cannot control what parts reporters put in print. I don't find all of the information provided by the mill to be sufficient myself. But on the balance, the possibility of a very limited area of impact is possible or even probably.

The science out there is not perfect, you can't test every organism with every effluent. No two pulp mill effluents are the same. I simply made comments on best available evidence based on pulp mill around the world. There are still a few pulp mill effluents out there that have significant effects, while some do not (see attached paper) however we can limit those effects with proper treatment. That by the way is not just a matter of having a fancy treatment system, it involves recycling all liquors in your pulping process, avoiding spills in the mill that can disturb a treatment system for a month, and operating that treatment system properly. The more complicated the treatment system, the harder it is to operate. This involves an environmental ethic and culture within the mill. Judging by some of the politics going on, that is perhaps not good.

While your experiments would not meet the rigor of scientific peer review, I do believe that they present interesting and valid preliminary evidence. I would encourage pressing the mill for increased testing on this basis. This should be done with graded concentrations of effluent, along with modeling of the effluent plume to truly assess the risk. I would be happy to participate in such with in collaboration with a fisheries organization such as Homarus.

Regards

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulps Replacement ETF Project
Date: March 7, 2019 8:45:47 PM

Dear Environment Minister Margaret Miller;

We are writing to express our concerns about Northern Pulps Replacement ETF Project as described in their EA application to the N.S. Department of the Environment. We have lived along the West River in Pictou County approximately 15 kilometers from the pulp mill for forty-seven years and have first hand knowledge of its effects on the surrounding community related to air quality and water pollution. We have stated our primary concerns below.

1. On page 45 Sect.1-7 of the Registration Document, Northern Pulp states that it plans to burn large volumes of sludge from their new wastewater treatment system in the existing power boiler. This power boiler has exceeded emission limit levels in the past according to test results posted on Northern Pulps website and does not have a precipitator as is required by other jurisdictions. It is reasonable to conclude that burning toxic sludge in a boiler with filtration issues could adversely effect air quality. Pictou County already has some of the highest rates of cancers in the country.

2. According to Northern Pulps application, the treated effluent will contain solids (pg.84 table 5.6-1 of the EA document lists the amount as 4 tons daily) which were previously settled out in the Boat Harbour tailing ponds. Northern Pulp hasn't identified in their EA application, which toxic chemicals and heavy metals will be in these solids. How can scientists and regulators study the effects this effluent would have on marine life if they do not know what is in it? Your decision should be based on science but there is no science here.

Any contamination of lobster and fish exported under the Atlantic Canada brand, could destroy the reputation of that industry.

The issues raised by Northern Pulps Replacement ETF Project are very troubling. The missing information regarding the identification of toxins and chemicals in the effluent could result in serious health risks to Pictou County residents from dangerous air emissions. There could also be consequences to marine life from these unidentified solids settling on the ocean floor of the Northumberland Strait.

We are therefore requesting that you require Northern Pulp to provide this information before their application is considered and that you then order an Environmental Assessment Report on this project.

Respectfully;

From:
To: [Environment Assessment Web Account](#)
Subject: NORTHERN PULP REPLACEMENT EFFLUENT TREATMENT PROJECT
Date: March 7, 2019 8:56:02 PM

No extension! No pipe!

I wish to express my concerns with Northern pulp causing further air and water pollution.

Northern pulp say there will be "no significant environmental effect". Referring to the canadian environmental protection act; kraft mill effluent has significant effects on aquatic life. Effluent is toxic. Northern Pulp says that they dont really know what the chemistry of the effluent will be. We have heard this before and seen the contamination from leaks and now in our air. Mercury, furans and dioxins found!

Pumping toxic effluent directly into the Northumberland Strait is not an acceptable alternative. The effluent will not be toxin free no matter how it is treated and will bio-accumulate in bi-valves (mussels, scallops, oysters) and lobsters. Seafood will be contaminated. When the pipe leaks the water shed or our land will be contaminated.

I am also concerned with the idea they have on burning sledge. Please stop this.

Fifty years of environmental racism is shameful and it is time to resolve this issue. Honour the Boat Harbour act. We need a Federal Assessment, not just a Provincial assessment. No more extensions.

People's Health and High Quality standards of environmental protection should be our goal.

We have to live with Industry. We don't have to live with industry that pollutes.
Please do not allow this industry to distroy our earth any longer.

From: noreply@infogrove.com
To: [Environment Assessment Web Account](#)
Cc: [@yahoo.ca](#)
Subject: Support for Northern Pulp Environmental Assessment
Date: March 7, 2019 9:06:54 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

From:
To: [Environment Assessment Web Account](#)
Subject: Submission re: Northern Pulp
Date: March 7, 2019 9:26:15 PM
Attachments: [CofC submission re Northern Pulp treatment proposal 05March2019.pdf](#)

Please find my submission attached.

All the best,

organizing on unceded ancestral territory of the Mi'kmaq Nation

The Council of Canadians | Le conseil des canadiens
Atlantic region: 902.422.7811 | 1.877.772.7811

www.canadians.org

The Council of Canadians is a watchdog organization that provides independent analysis and supports grassroots campaigns for social justice. Without government or corporate funding, we rely on individual supporters like you to keep our campaigns and organizing efforts going. [Click here to donate.](#)

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, NS, B3J 2P8
Submitted via email: ea@novascotia.ca

07 March 2019

RE: Northern Pulp's Replacement Effluent Treatment Facility Project

Dear Minister Miller,

I write to you on behalf of the Council of Canadians, a grassroots social justice organization with more than 100,000 supporters across Canada concerned with protecting our water and environment for future generations. We are working to eliminate the social harm and inequality that climate change perpetuates, and the historical injustices that Indigenous people and people of colour have experienced in the present day.

The Council of Canadians calls on the Nova Scotia government to reject the proposed Northern Pulp Replacement Effluent Treatment Facility Project based on the following:

Concern: Lack of evidence provided by proponent on risk

Northern Pulp's submission does not prove a lack of significant risk, and is missing critical data on many issues. One example of this is mercury, which is recognized by Health Canada to have significant risks to human health. Northern Pulp hardly mentions their site on Abercrombie Point is contaminated with mercury and disrupting this contamination on a site surrounded by water requires extreme caution and a full examination (reference Joan Baxter's article in the Halifax Examiner: [*Northern Pulp's Environmental Documents: missing mercury, a pulp mill that never was, and oodles of contradictions*](#), March 5, 2019).

The company's claims that damage will be minimal, there will be no significant residual damage in any situation (whether by normal operation or accident), and whatever damage done can be mitigated, are not quantified. There is insufficient evidence to know exactly how broad that damage will be, hence the company's claims are not credible and should not be accepted.

Fishing is a major part of this community, and the economic backbone of not just Nova Scotia but the other two provinces who would be impacted by the proposal – Prince Edward Island and New Brunswick. The tourism industries in the Maritime provinces are also vital, part of this being dependent on outdoor recreation, which is also highly valued by the people who live

here. The reality is that once ecosystems are damaged, they are not easily healed; just as damaging one part of the system inevitably impacts the whole. As such, we do not accept that monetary compensation is appropriate mitigation for damaging an ecosystem and a sustainable industry.

Per [Nova Scotia's Environment Act](#) (*Purpose of the Act*, 2.b.ii.), “the precautionary principle will be used in decision-making so that where there are threats of serious or irreversible damage, the lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.”

Concern: Lack of Indigenous consent

According to the United Nations Declaration on the Rights of Indigenous Peoples, Indigenous peoples have a right to free, prior and informed consent. We expect that Nova Scotia Environment will go above and beyond the base expectations to ensure the appropriate level of consultation occurs moving forward, specifically around issues of consent.

It is clear that Pictou Landing First Nation (PLFN), both the elected leadership and the community, are opposed to this proposal and want the government to keep its promise of closing the current effluent treatment facility. They want Boat Harbour closed on schedule, and they do not want the risks to the fisheries that piping effluent into the Northumberland Strait represents.

Years ago, the concerns of PLFN about how effluent would affect their community were ignored. All of their concerns proved to be accurate. We believe their concerns are accurate today too.

Concern: Lack of community consultation, inadequate time for meaningful community response

The community was not consulted on the actual project submitted by Northern Pulp for environmental assessment. Any public consultation was on a somewhat similar ETF proposal discharging into a completely different location. In addition, a 30-day period for public consultation on 2000 pages of previously undisclosed information does not fulfill requirements for meaningful public review and input.

Concern: Climate change

Oceans are already stressed by climate change. Scientists warn that the Gulf of St. Lawrence is warming more rapidly than almost anywhere on Earth. Adding additional stressors to a system that is already stressed is not wise. The Northumberland Strait is an area that requires additional protection, not additional degradation.

This past October, The United Nations' Intergovernmental Panel on Climate Change released its dire warning that we have just over 11 years to curb GHG emissions before the Earth's climate tips past a point of no return. Industry creep is such that government is willing to risk other billion-dollar industries as well as the global climate for this fundamentally undemocratic and unsustainable industry.

What we do need is a just transition to a sustainable economy, and specifically for the hundreds of workers employed by Northern Pulp. We also need to knit all the climate solutions we know into a more compelling and tangible vision to protect our oceans and our planet.

Conclusion

This project is simply not worth the risk. The precautionary principle means it is incumbent on the Nova Scotia government to err on the side of caution.

A bigger picture reflection on this, such as Joan Baxter's "The Mill" (in chapter 16: The Politics of Pulp, for example) or Dr. Ingrid Waldron's "There's Something In the Water: Environmental Racism in Indigenous and Black Communities," points to a failure by successive provincial governments to protect the people of Pictou Landing First Nation and the broader community, and environment in and around Boat Harbour and the Northumberland Strait. Although you have a task at hand with specific considerations, please keep these bigger issues in mind.

The Council of Canadians calls on you to reject the proposed Northern Pulp Replacement Effluent Treatment Facility Project. If you don't feel you can do this with the evidence before you, please call for a full Environmental Assessment report on this proposal. Either way, **we support the closure of the effluent treatment facility in Boat Harbour on schedule.**

Sincerely,

| The Council of Canadians

Organizing on unceded and unsurrendered ancestral territory of the Mi'kmaq Nation

cc: Nova Scotia chapters of the Council of Canadians
Friends of the Northumberland Strait

From:
To: [Environment Assessment Web Account](#)
Subject: Replacement Effluent Treatment Facility Project
Date: March 7, 2019 9:54:50 PM

Dear Minister:

I am writing in regards to Northern Pulp's Replacement Effluent Treatment Facility Project.

My family has fished the grounds off the east end of Pictou Island for four generations.

obtained my Fishing Masters IV, and now fish lobster with my father in the Northumberland Strait.

In section 9-15 of the EA it is stated that "there is presently uncertainty regarding the chemical composition and characterization of the marine treated effluent discharge." On page 489, the report admits that "effluent chemistry characteristics will not be known with certainty until the project is operational." Despite this uncertainty the Executive Summary states "No Significant Residual Environmental Effect Predicted" during any portion of the project to any aspect of the environment. They then conclude "It is not predicted that the installation of the pipeline will result in long term serious harm to fish or fish habitat."

The lack of certainty in the effluent composition has obvious concerns as to how the environmental risk assessment was modelled by the company. Without knowing the composition of the effluent, how can the effect on the environment be measured. 87 million litres of treated effluent with an unknown chemical composition is to be discharged daily into the ocean and across the board they predict no significant effect. This indicates to me that no accurate modelling was completed by the company and that they clearly do not respect this province's environment, nor intelligence.

My family has enjoyed many summer vacations playing on the beach and swimming in the Northumberland Strait. Last year my wife and I got married on Pictou Island, and hope to raise our family in a clean environment without fear of pollution and contamination.

It is clear to me that this project has a large likelihood of causing adverse effects to the environment that cannot be mitigated. I urge you to order a full environmental assessment before moving forward on this proposal, if at all. I would be proud to see my home province focus on transitioning this community to prosper in a way that values the environment we live in and the health of our people.

Thank you for your time and consideration.

Pictou, Nova Scotia

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 9:57:21 PM

Project: - Choose - Comments: Dear Minister: I am writing in regards to Northern Pulp's Replacement Effluent Treatment Facility Project. My family has fished the grounds off the east end of Pictou Island for four generations.

obtained my Fishing Masters IV, and now fish lobster with my father in the Northumberland Strait. In section 9-15 of the EA it is stated that "there is presently uncertainty regarding the chemical composition and characterization of the marine treated effluent discharge." On page 489, the report admits that "effluent chemistry characteristics will not be known with certainty until the project is operational." Despite this uncertainty the Executive Summary states "No Significant Residual Environmental Effect Predicted" during any portion of the project to any aspect of the environment. They then conclude "It is not predicted that the installation of the pipeline will result in long term serious harm to fish or fish habitat." The lack of certainty in the effluent composition has obvious concerns as to how the environmental risk assessment was modelled by the company. Without knowing the composition of the effluent, how can the effect on the environment be measured. 87 million litres of treated effluent with an unknown chemical composition is to be discharged daily into the ocean and across the board they predict no significant effect. This indicates to me that no accurate modelling was completed by the company and that they clearly do not respect this province's environment, nor intelligence. My family has enjoyed many summer vacations playing on the beach and swimming in the Northumberland Strait. Last year my wife and I got married on Pictou Island, and hope to raise our family in a clean environment without fear of pollution and contamination. It is clear to me that this project has a large likelihood of causing adverse effects to the environment that cannot be mitigated. I urge you to order a full environmental assessment before moving forward on this proposal, if at all. I would be proud to see my home province focus on transitioning this community to prosper in a way that values the environment we live in and the health of our people. Thank you for your time and consideration.

Email: @gmail.com Address:

Privacy-Statement:

agree x: 71 y: 18

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 10:00:18 PM

Project: replacement_effluent_treatment_facility_project Comments: My husband and I have a great concern over the effluent from Northern Pulp which will be spewed into the Northumberland Strait from Northern Pulp if their proposal goes through. We live at Braeshore, Pictou County, N. S. Our residence is very close the beach where we enjoy swimming in the summer and walking along the beach with family and friends. We also enjoy watching the lobster fishermen haul their traps during the season. It would be a terrible shame for the fishermen to lose their jobs because of the contaminated water which would be caused by Northern Pulps proposal which I understand, there would be 70 to 90 million liters of treated effluent still containing toxic substances spewed into the Strait daily. When we moved into our house here in Braeshore in the early I took a walk to the beach just before dark one evening and all along the shoreline was knee high foam with a brownish ting which I thought at the time came over from Boat Harbour, across the water from us, where the effluent was being pumped from Scott Paper which the pulp mill was called at that time I took photos of the foam just in case I may need them sometime and still have them in my possession. I also sent copies at that time to the Department of the Environment but never heard back from them. Let us keep our beautiful Northumberland Strait free from contamination from Northern Pulp. Thank you. Name: Email:

@eastlink.ca Address:

Privacy-Statement:

agree x: 64 y: 23

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 10:18:39 PM

Project: replacement_effluent_treatment_facility_project Comments: Northern Pulp effluent treatment facility Volume of effluent 82,500 cubic meters/day is 57,300 litres per minute, system maximum. 70,000 cubic meters/day is 48,600 litres per minute, the rate which is most commonly created during the normal operations which the plant manager reported to me in conversation. Please note: the volume of one cubic meter is 1000 litres. The Northern Pulp Nova Scotia's proposed average daily waste water is 62,000 cubic meters per day of effluent, which is a rate of 43,056 litres per minute of liquid waste from the the Northern Pulp Mill and is also 717 litres per second. The volume of liquid waste from he Northern Pulp Mill is extremely high. The upper maximum waste effluent suggested by Northern Pulp could reach 82,500 cubic meters of daily effluent which would be 954.8 litres per second entering into the clarifiers and then subsequently entering the environment. The current effluent temperature from Mill production to the Boat Harbour Effluent Treatment Facility is at 40- 42 degrees Celsius. There is no known heat loss for the current pipeline although it is likely more than a kilometre in length. However, current effluent stream's flow rate and its polyethylene/polypropylene piping likely prevents any heat loss, because the Mill is in steady state operations/production. The proposed treatment system will rapidly reach a steady state heated condition. The proposed treatment tanks will not be able to cope with the magnitude of heat thermal energy to significantly make a difference within 24 to 48 hours of steady state operations. The heat loading is 700 to 900 litres per second at 40 to 45 degrees Celsius. Heat exchangers as proposed can not handle the energy associated with the time limits of the system. A 1,000,000 L one million litre storage tank may have the capacity to store Northern Pulp liquid waste effluent for 20 minutes +/- 1 minute. At 40,000 L/minute of NP liquid waste effluent, fills a 1,000,000 L storage tank within 25 minutes +/- 1minute, assuming it was empty at before hand. The in-ground basins proposed for the Northern Pulp Nova Scotia's effluent treatment clarifiers are at 12,000,000 litres which is approximately four 4 hours holding capacity. With 700 to 950 litres per second entering the clarifier, the turbulence within the clarifier and heat loading will nullify its capacity to remove heavy solids dropping from the waste water suspension or remove floating solids from the turbulent waters given foaming issues. The addition of defoaming agents while helping to cut bubbles, the effluent flow rate will overpower a defoaming agent. The kraft digestion process of the pulp wood fibres, the sulphites, the hydroxides, the heat, and the off-gasing of the oxide s of sulphur will be a huge issue. The proposed 11.4 km pipeline which is 36 inches inside diameter will contain 7,479 cubic meters of waste effluent, or approximately 7.5 million litres of effluent should a catastrophic pipe failure occur. This environmental risk is significant, given the communities have no experience with large effluent pipeline failure. The 7.5 million litres of effluent does not include headwater effluent that would continue to be pumped or gravity fed from the Mill should the transmission pipeline fail. The proposed 12 million litre clarifiers have a maximum four hour capacity to treat the effluent. The current Boat Harbour Effluent System has approximately seven to ten days by comparison. The open clarifiers will pose a very significant occupational health risk to Northern Pulp Mill workers/employees. The daily exposure limit to hydrogen sulphide H₂S is less than 1 part per million ppm. The three clarifiers will off-gas hydrogen sulphide from 5 to 50 ppm depending upon winds. Hydrogen sulphide toxicity is not well addressed given labour regulations. This one gas can be potentially deadly as 100 ppm H₂S with be fatal within 30 seconds. The effluent treatment facility does not address hydrogen sulphide gas emissions. Clarifiers The primary stage

clarifier may remove 2.3 grams of suspended solids per litre of waste water with an on-going rate of only 0.3 grams per litre clarification as stated. Already stated, the incoming turbulent flow by the 700 to 950 Litres/second inbound waste waters into the clarifiers will negatively impact settling, raking or screening actions of the on-going success in the clarifier systems. Clarifiers work best with a calm steady state fluid, where there is little turbulence and there are more than 12 to 24 hours for heavy solids to fall from a mechanical suspension and lighter weight solids can float to the water's surface to be skimmed off. Clarifiers work on the differences in specific gravity and do not address water soluble chemicals... Little discussion is made of wood fibres and the inorganic composition of the waste waters. The process chemicals in a Kraft pulp digestion process are all water soluble. The waste wood fibres lost in the waste waters, float due to the specific gravity. The first stage clarifier does not describe any wood fibre retention, nor the capture of water soluble chemicals. The clarifier is designed to capture only dense total solids which may or may not settle out in the very turbulent clarifier environment. Waste matter from the clarifiers will be diverted to a sludge tank and ultimately to the Power Boiler para 5.2.2.8. The text as presented is misleading. It states: Pressed sludge/solids containing water will be combusted in the power boiler to produce heat. The text should state any water component of the waste sludge is totally released to the atmosphere. While the power boiler, produces steam and electricity, any moisture in the combustion chamber can only exit via the chimney and into the atmosphere of Pictou County. Should this same moisture contain soluble sulphites, sulphides and related process chemicals, these will all be made airborne by the combustion process. Please also note: The combustion/power boiler is the least equipped for pollution abatement. Marine Pollution at Caribou Harbour The Caribou Harbour opening suggested for the effluent diffuser is adjacent to Northumberland Ferry vessel route. This means the visitors to Nova Scotia or leaving the Province via the ferry service will be subjected to high concentrations of sulfur dioxide gases and related sulfur oxides arising from the effluent diffuser. The effluent water exiting the proposed diffuser apparatus will be toxic to marine life. With respect to ferry users, the effluent is "fresh" water not salt water, very hot 25 to 35 degrees Celsius and very gasified. This will result in the effluent rising to the surface of the Northumberland Strait water immediately. The notion that these waters will mix uniformly by natural blending is misleading. The differences in temperature and specific gravity will cause the effluent to create a continuous rift pattern which will prevent wishful mixing/blending as suggested by Northern Pulp. The analogy is higher industrial chimneys from factories were thought to better diffuse airborne pollution. Scientists and engineers now know this does not occur in fact. The proposed position of the effluent diffuser is immediately upstream of the Caribou Provincial Park, the Pictou Lodge and across the harbour is the Pictou Landing First Nations lands. As the Northumberland Strait tides fall twice daily the Northern Pulp effluent will be mixing and flowing toward these locations. The smell of oxides of sulfur, sulphur dioxide, hydrogen sulphide and related kraft pulp wastes will greatly impact beaches, cause undue respiratory stress for humans and other mammals on, in or adjacent to the Northumberland Strait. Marine Habitat 717-949 litres of Northern Pulp's liquid effluent will enter the Northumberland Strait per second. The Biological Oxygen Demand BOD, the pH and maybe physical attributes, may have been pretested. The BOD usually requests a laboratory test which requires at least an hour of lab time to perform the testing. Stopping production because of a failure of BOD testing all not happen due to the safety to the workers and the plant processes. Compliance issues will be next to impossible to evaluate as the waste water will be entering a saltwater environment well below the surface waters. 717-949 litres of very hot water per second will be entering the Northumberland Strait. The huge temperature variation with receiving waters of 25 to 35 degrees Celsius will be lethal to marine life. Northern Pulp Management suggest they expect this lethal impact to be spread over an area of 100

meters/any direction from each diffuser. However tidal action, thermal rifts and the specific gravity difference will cause the warmer waste waters to rise, having a larger impact on fish and marine mammals. The inorganic waste chemicals from the NP Mill's operations, will impact shellfish life and subsequent marketing. Little work has been done to accurately quantify waste metals for the Mill's operation. The quantities of iron, nickel, chromium, molybdenum and other ingredients within stainless steel and chromium plated steel roller surfaces have left an impact in Boat Harbour. Having tested the embankment soils and having had a third party test laboratory analyze the soil samples, there was a noticeable trend likely from eroded stainless steel, worn pipes, worn roller surfaces, etc.. that 50 years of operations has led to chronic heavy metal waste/pollution rather than an acute issue. Should Northern Pulp and this kraft pulp process operate for another 25 years or more, the inorganic elemental pollution needs to be addressed as part of current evaluation. The lead, tin, antimony, cadmium from bushing/metal bearings, chromium from hard electroplated chromium rollers, chromium/nickel from stainless steel piping, cadmium plated bolts and fasteners, all these metal suffer daily erosion, corrosion and cavitation which will impact the Northumberland Strait lobster fishery. The oxides of sulfur, the changes in salinity, water temperature, turbidity will impact fish habitat and the migration of fish stocks within the Strait. Northern Pulp's Environmental History Paper Excellence and Northern Pulp Nova Scotia operated the kraft pulp mill without an electrostatic preceptor for more than a year without reporting its failure to the community or its regulator. Northern Pulp's Power Boiler has failed emissions testing. The Northern Pulp's Recovery Boiler failed emissions testing. Regardless of failed airborne pollution testing, the Mill operations continued until appropriate shutdowns could be scheduled well after directions/Minister's Orders were given to the Mill management. The proposed size of the first and second stage clarifiers and the oBAS technology may appear interesting to the environmental assessment decision makers. However, there is only a four hour residency of waste waters to remain in holding tank system. However with waste waters of 700 - 950 litres per second entering each of the first and second stage clarifiers, this flow rate will cause extreme turbulence. The magnitude of the waste water flow rate limits the capacity of the clarifiers. Furthermore the off-gasing of hydrogen sulphide from the clarifiers will create a process that is difficult to understand and control as well as potentially deadly to workers exposed to the open clarifiers. The recent Mill Management, while perhaps willing invest to operator training, most likely will under resource this waste treatment system as previously demonstrated. The waste treatment proposal only addresses the BOD/COD, pH attributes of the waste waters. The off-gasing from sulphites/sulphides/oxides of sulphur, wear metals, inorganic chemical iron, nickel, chromium, cadmium, sodium sulphide, sodium sulphates pollution, and the huge thermal pollution issues are not addressed by the proposed plan of action. The high density polyethylene or polypropylene piping system to transport the waste water effluent to the final marine site will effectively insulate the waste waters and prevent heat loss. The daily loss of 62,000,000 to 82,500,000 litres of hot water 35 to 40 degree Celsius into the environment is a criminal. Conclusions: The proposed effluent treatment system is undersized for the clarifiers and the current daily waste water volumes. Once effluents have passed the clarifier system, there is little opportunity for subsequent remediation should BOD testing indicate an issue. BOD testing requires an hour to complete in an onsite laboratory test, which only provides three hours to stop production of the Mill should a compliance issue arise. Waste effluent at 35 degrees C. or more will enter the Northumberland Strait killing marine life. This effluent thermal loading alone is deadly, regardless of BOD/COD/ heavy metals, total suspended solids, etc. The projected waste water path via the diffusers, does not accurately address the thermal toxicity to marine life, the foul smelling oxides of sulphur by-products, the chronic heavy metals contamination from the Mill's equipment, piping, pumps, chromium electroplated rollers, presses etc. which will

enter the Northumberland Strait. The waste waters are out of the visual sight of the Mill Management, its response teams, and could have days of non compliant waste disposal before regulatory processes would require immediate shutdown of the proposed waste treatment system. This would be at the expense of fisherman, marine life, and a valuable coastal zone area for tourists, residents and endangered marine mammals. Lastly An Industrial Approval should not be considered by the Province of Nova Scotia for the continuing operations of the Northern Pulp Nova Scotia Limited the Mill until the Mill replaces the existing kraft caustic digestion technology and implements a closed loop water pulping process: such that there is little or no waste management issue, no need to dump waste process chemicals and spent waters into the marine environment of Pictou County, the Pictou Landing First Nations or the Strait of Northumberland. Sincerely Chemist

. Name: Email: @gmail.com Address:

: Privacy-Statement: agree x: 48 y: 28

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 7, 2019 10:22:19 PM

Project: replacement_effluent_treatment_facility_project Comments: March 6, 2019
Environmental Assessment Branch Nova Scotia Environment P. O. Box 42 Halifax, NS B3J 2P8
Dear Minister: I am writing regarding the Northern Pulp filing for Environment Assessment for their proposed effluent pipe into the Northumberland Strait. I have been a fisherman for 37 years and I have some concerns that enough study has not been done and a Federal Environment Assessment should be done so the everything that can be done will be. First - Where NP plans to put their pipe and run their effluent into the Strait it is in an area where the tides meet at the Bell Bouy. The effluent will be taken in all different direction with the the rising and falling tides. Second - NP have not stated what will be in the effluent when it comes out off the pipe into the Strait. If the Minister does not know - how can she be 100 sure that nothing will be harmed? Not the marine life, not the ecosystem or even the people swimming in the water. All along the coast there are a number of beaches that residents and tourist visit and enjoy. Just down the shore from the Caribou wharf, where the purposed pipe will be, there is a Provincial Park where there is also a camp ground. Last summer they had the most campers they ever had and they come there from all over and the beach is a big draw. If the effluent pipe is there no one would want to swim or even be on the beach which would be a terribly loss for the area. ` Third - if the pipe is going to be buried, how will they know if it has broken or leaked. We know that there was a pipe break carrying effluent and it was only detected by a person out walking. What if it happens where no one would notice - how would they know and what would the ramifications be it it leaked for a long time? There is heavy ice in the Northumberland Strait most winters, how could the pipe survive the heavy pressure that would be applied to it. How can the people enjoy the water for swimming, digging clams and fishing on Caribou Island, Pictou Island and all along the shore if they do not know what is in the water? Taking a big risk with their health. I strongly urge that you make a choice for a Federal Assessment to make sure that our environment is not ruined by NP effluent. Thirty days is not long enough for everyone to reply to the finding that could cause thousands of days of destruction to our marine life.

Pictou, Nova Scotia. Name:

Email: @gmail.com Address:

:

Privacy-Statement: agree x: 52 y: 20

From:
To: [Environment Assessment Web Account](#)
Subject: MY EA Submission for Northern Pulps Replacement Effluent Treatment Facility Project
Date: March 7, 2019 11:13:41 PM
Attachments: [This is to advise that on February 7.docx](#)

To the Nova Scotia Minister of Environment,

Please find a Word Document attached of my submission to the Northern Pulp Replacement Effluent Treatment Facility Project.

If at all possible could you please notify me of receipt. I thank you for your time and appreciate the opportunity to speak on this very important matter to all Nova Scotians and our good neighbours in Prince Edward Island and New Brunswick.

Most Sincerely,

This is to advise that on February 7, 2019, Northern Pulp Nova Scotia Corporation (Northern Pulp) registered the Replacement Effluent Treatment Facility Project for environmental assessment, in accordance with Part IV of the Environment Act.

This is my submission to Northern Pulps EA.

A big undertaking a lot of information, well over 1600 pages and could cause a great impact on the environment, so where to start?

How about classification first?

Class 1 undertakings are usually smaller in scale and may or may not cause significant environmental impacts or be of sufficient concern to the public.

Class 2 undertakings are typically larger in scale and are considered to have the potential to cause significant environmental impacts and concern to the public.

Do you really feel this is a small scale undertaking...if so why is there over 1600 pages to explain?

Given the damage to Boat Harbour and what it will take to clean it up, is it to be considered a non significant environmental impact?

If so, then why a Federal Class II to clean it up?

If it takes a Federal Class II to clean up a mess, then it should it not take a federal Class II to move it, from one location to another?

Plus in your Class II classification under Category it says Industrial Facilities it says

#3. Pulp Mill, Which should indicate anything to do with a Pulp Mill. It does not say Class I for Mods, It classifies the whole facility as a Class II.

The Effluent

Dillion Consulting said this.

In an email between Northern Pulp's technical manager and Dillon Consulting, a Toronto-based consulting firm, written on Nov. 29, 2017 the technical manager said in reference to the effluent coming from the proposed Northumberland Strait pipeline, "some say effluent quality will be worse than today because of all the polishing that is happening across the Boat Harbor basin—and they are correct to some extent."

On page 489- 90-91 Section 9.1 they state

At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentrations) will not be known with certainty until the project is operational. Some other current areas of uncertainty include limited recent or current baseline

environmental media and marine food item chemistry data, and limited data on traditional marine food item harvesting and consumption patterns within the PLFN community

The Toxikos (2006) HHRA was a highly conservative assessment that substantially overestimated exposure and risk to potential human consumers of fish and shellfish that may be influenced by the effluent diffuser discharge in Bell Bay. The authors concluded that there were negligible risks to human health from consuming any marine food item harvested in the vicinity of the effluent diffuser, for any of the substances that were assessed in the HHRA. This study considered numerous substances, but through a multi-step screening process, ultimately selected only four COPCs for assessment (i.e., cadmium, mercury, selenium, PCDD/F). The Toxikos (2006) screening procedure is addressed further in Section 9.2.4.2.1.

It is believed that the assumed effluent chemistry characteristics and composition as well as the effluent diffuser design for the Tasmania project are similar to what is proposed and designed for the NPNS project (KSH Consulting, Personal Communication). Both mill facilities utilize ECF bleaching processes, and this will not change for future NPNS mill operations.

I question where the Department of Environment would allow Effluent that is quoted by the Firm Dillion Consulting to be not only less treated as what is presently coming out of Boat Harbour, but also containing unknown substances and quantities, until it is actually going out into the Strait without a Class II assessment.

I also question why Northern Pulp who continue to state that there are dozens of Bleach Kraft Mills in Northern America, that they would chose a Toxicology Report done for a Paper Mill in Bell Bay, Tasmania that was never even built ?

How can you use a report that had no real effluent to test, but simply an assumed and imaginary waste product?

Further to add, because such Mill was such an environmental risk the banks refused to back financing to have it built.

So why not a Toxicology report from one of the dozens in operation here in North America?

This is a very serious question the Nova Scotia Department of Environment should be asking.

If Northern Pulp and Dillion Consulting are using such a report to base their confidence in this treatment faculty to be a successful operation, then I think that should be waving enough red flags and blaring sirens to tell you this needs a much deeper investigation.

If the same information could not pass the litmus test to build a Billion Dollar state of the art Pulp Mill, then surely it should also fail the test to build a treatment plant for a Mill that is over fifty years old.

Effluent Volume.

5.2.2.9 of the Dillion Report

The maximum effluent flow rate of 85,000 m³ /day was used for the analysis of effluent water quality following treatment. The highest flow rate represents the most challenging conditions for plume dispersion at the discharge point and is therefore considered to be worst case. Flows lower than the maximum daily effluent flow will result in improved mixing. The current annual average flow is 63,600 m³ /day for comparison.

Dillion says they are using 85,00m³/day as worst case scenario and saying the daily average is 63,600 m³/day for their comparison. Yet In February of 2016, Nova Scotia Environment has said it had resolved the outstanding issue of an Appeal by Northern Pulp. In doing so it allows NP to take a daily maximum of 92,310m³/day. If this can be the case then the worst case scenario presented by Dillion is untrue and the plume will spread further and be of worse quality.

Temperature of Effluent

5.2.2.9 of the Dillion Report as per table 5-2-1

Temperature oC 25 (winter) 37 (summer)

Although we see nothing in the Dillion report as to Lobster larvae and the effects on them by the Effluent I give you this information.

Lobster larvae and the Waste Water Pipe into Northumberland Strait The writer of this has just completed researching some of the many studies done about how Cold water Lobster hatch and eventually become Market size . Female lobsters develop eggs that adhere to the shell overwinter and hatch the following late June into July. These larvae live in the top 2 meters of the water for about 20 to 30 days while they grow through three stages and finally reach stage 4 and then fall to the water bottom where they live in the mud /sand / rocks for at least 5 years and reach a weight of 500 grams (1 LB.) . Each shell moult sees the lobster gain about 40% in weight. By year 6 to 8 they reach 750+ grams and can be caught and sold. Some are not immediately caught and live to be much larger. It is the life of the hatchlings or larvae that was my research. It's a lengthy story but I'll shorten it to this summary ; Cold water Lobster are found from the coast of Gaspé down along the eastern shores of N.B. / NS and along the north shore of N.S. and around Cape Breton . Water temps during the hatching months ranges from 10C at Gaspé to about 15C down off Caribou, Chance Harbour, Little Harbour and beyond. The PEI shore has similar temps. Larvae live well in 10C water and better in temps up to 14 C . After that temp there is a lot of mortality until at 22C none survive. The warmer the water the faster they grow and rate of survival lowers a lot. If they survive until stage 4 size they drop down to the floor of the water and make homes among the rocks, mud , sand where most will live for another 5 years - moulting each year and increasing weight about 40% at each shell moult . By years 6 to 8 they have reached a weight of 1.5 lbs. and become legal catch. Some escape and live on for many more years. The temperature of the waste water from the proposed pipeline from the Pulp Mill across the Pictou Harbour and out to Northumberland Strait is estimated to be 25C in cooler months to 37C in warmer summer months. All 70 to 90 million litres. This being flowed into 15C N . Strait water will gradually warm the coastal waters the larvae live in. Every degree above 15C will shorten the life of a cold water lobster larvae. When the temperature reaches 16.5C survival rate lowers until at 22C none survive.

Dispersion of the Effluent

5.3.1.11 Dillion Report

Marine Outfall Construction

The terminus of the effluent pipe consists of an outfall location with a three-port diffuser, situated at a depth of approximately 20 m.

Initially in the public presentations and diagrams shown we were told that the pipe would have the Effluent exiting through six port diffusers. Now it has become three. With this reduction to three ports that would mean that the exit flow of the effluent would be at a greater force and not spread over as great an area as with six diffusers. Thus making much of data given about dispersal of the Effluent would not seem to be relevant.

This very questionable effluent quality and quantity is enough to say that there is just too much risk to damaging the fisheries to not make the decision to have a Class I Provincial, but rather insure it is a Class II Federal Assessment.

As we are now not talking about the possible loss of a Billion Dollar Mill, but instead a possible loss of a Multi Billion dollar Industry. Again I say the risk is too great for such a weak assessment. Give it the due diligence it deserves.

To not go into a lengthy letter I will leave the effluent as the most in depth of my submission. The rest i will just present as bullet points that I feel are also a strong indicator of needing a Class II Federal Assessment.

- They say Non Significant effect on Migratory Birds. Yet within 1500 ft of leaving Northern Pulp Property the route of the Pipe will attempt to pass through a large nesting colony of Cormorants, which in Nova Scotia is a protected species.
- They say Non Significant effect on Groundwater. Can they be sure of this with at least two serious pipe leaks? More importantly since they have plans to run the pipe over the Town of Pictou's Watershed. To also add without Community or Council meetings to inform us of this, but letting the Town and the Citizens find out through a media release of a meeting that took place between PLFN and Fishers.

- The proposal calls for the pipe to go underwater at Caribou Harbour and run out into the Strait for 2.1 KM.
They do understand that the Caribou Harbour by simply viewing the Marine Chart at
<http://fishing-app.gpsnauticalcharts.com/i-boating-fishing-web-app/fishing-marine-charts-navigation.html?title=CARIBOU+HARBOUR+boating+app#12/45.7600/-62.6850>

Quite dramatically shows that the greater majority of the harbour is less than 5 meters deep and the bottom is a shift and moving sandbar.

It also has a busy Ferry Terminal that uses a Channel for the Northumberland Ferry Service to Move in and out through. This Channel gets dredged every few years, so having a pipe run anywhere close by would be detrimental to not just the ability to dredge, but also the possibility of pipe damage due to dredging.

A further danger for damage to the pipe would be the Ice in the winter. From information gather from the Canadian Seabed Research. Ice Scouring is common in the Strait and it comes with great force at times creating deep cuts or grooves in the sea bed.

There were 133 ice scour events reported from the SSS data collected in 2014. Scour measurements were taken from unscoured, smoothed seabed datum to the deepest point of the scour. The ice scour events identified occurred in water depths from 2 to 13 m. Scour was most frequent in water depths of 4 to 5 m. Sediment transport within the Northumberland Strait highly influences scour degradation and the extent of infilling that occurs (CSR 2015). In terms of ice scour orientation, the majority of occurrences were found between 120 and 140 degrees azimuth, which is aligned with the predominant currents in the Strait. Ice scour lengths were predominantly in the 10 to 70 m range (76 % of occurrences), with a few occurrences exceeding the 100-m threshold. The width of most ice scour marks was less than 4 m (81 % of occurrences). Further details regarding ice keels and their distribution in the Northumberland Strait can be found in Obert and Brown (2011).

- As for a possible failure in the system where an accidental occurrence happens one must realize with the length of the pipe now extended to over fifteen Kilometers, that means there could be 100s of thousands of liters of Effluent that could be above legal allowable limits in the pipe. I see no plan in place to have this Effluent safely removed before it ends up in the Strait especially in winter. So just how would an accident of this nature be dealt with? Also if there is a failure in any section of the underwater pipe or it's Diffusers during the Winter when Ice is in the Strait, how is that to be rectified? Does the Northern Pulp Shutdown until the Ice is gone and the pipe can be repaired.

I will now end this letter of submission as I think there is more than enough proof here and questions ask that need to be answered seriously and concise before even the thought of a pipe being laid is given. There is so much more that I can present to you, like the burning of the dried sludge and the damage being done to our forests and on and on.

If the Mill closes, it will not be the loss of the Forest Industry, the forest will still be there. Of course there will be job loss, as unfortunate as that may be for some, Pictou County and Nova Scotian's will come together to help and other jobs will be found through reinventing our forest resources. That is what we do in this great Province of ours.

But if the pipe goes in we do risk two other Industries, those being the Fisheries and Tourism. Both of these will not return if the pipe fails. If the fish are gone there is no reinvent a harvest that is not there. The failure in the Strait will spread to the rest of Nova Scotia, PEI and New Brunswick, because we go by Atlantic Seafood Products and one tainted fish to the world means they are all tainted.

Once word gets around of the pollution then tourists will not come as they flock here mainly for the fact as our License Plate says...Canada's Ocean Playground.

I am really hoping that for the very first time in the History of Pictou County and the Mill, decisions will be made for the right reasons like the health of our communities and of our land and waters.

Most importantly not decisions made for anyone's personal gain or the gain of any Political Party, or Business, big or small.

I thank you for taking the time to read my submission.
Please do the right thing for Nova Scotia and Nova Scotians.

Most Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: Re: Comments on Northern Pulp's Replacement Effluent Treatment Facility Project Environmental Assessment
Date: March 7, 2019 11:50:34 PM
Attachments: [CH-B.png](#)

Dear Minister of the Environment,

I am writing in concern regarding the Northern Pulp Replacement Effluent Treatment Facility Project. I am a property owner on Caribou Island and have spent a lot of time over the past 30+ years exploring the area; whether it be swimming, canoeing, windsurfing or combing the beaches and tidal flats. I am very familiar with Caribou Island and surrounding areas, and feel that I can offer some insight into this assessment that may be of use.

On a personal level and on behalf of my fellow members of the Nova Scotia Windsurfing Association, I would like to address the risk of direct human contact with the effluent in the vicinity of the proposed outfall location CH-B. While this proposed outfall location is stated to be 4km from shore, it is in fact roughly 2km from both Caribou Island and Munroe's Island, both of which contain provincial parks (see attached map). I have been windsurfing off Caribou Point for over 20 years and it just so happens that this proposed outfall location is a typical gybe (turning) point when sailing in this area under common wind directions. High speed turning on a windsurf board can commonly lead to spectacular crashes and sometime force unwanted ingestion of water. As a result, this sea water can be trapped within the ear canal or sinus cavity for an extended period of time. As hilarious as this may sound, it happens frequently during a day of sailing. For this reason, I would like this project's assessments to not discredit the human exposure factor at this location simply due to assumed remoteness. I insist that a more complete assessment be required in order to address the human health risks as a result of direct and prolonged exposure to effluent laden seawater.

I would also like to see specific studies regarding the potential intrusion and accumulation of effluent-borne contaminants affecting the water quality in Caribou Harbour, Caribou Rivers and other nearby tributaries. Given my experiences within these waterways, I can attest to the significant incoming tidal currents passing the proposed outfall boundary, pushing water into Caribou Harbour many kilometers upriver of Big and Little Caribou River and into various lagoons and saltwater marshes. I worry that the constant ebb and flow in this area could lead to long term accumulation of pollutants, which could be detrimental to the health of these sensitive and important ecological areas that are home to a diverse range of aquatic and avian life.

It should be noted that this proposed outfall site was chosen late in 2018, and appears to have not undergone any detailed analysis of a baseline water quality analysis the area. As stated in section 8.2.1, the Pictou Harbour water quality data is being used as "*a proxy for Caribou Harbour with respect to water quality, in the absence of available water quality data for Caribou Harbour*" Using Pictou Harbour as a baseline is contradicted in 9.2.1 stating that Pictou Harbour and other surrounding areas are prohibited from local shellfish harvesting due to water quality issues whereas in Caribou area "*there are several active recreational and commercial fisheries in the area and there are also currently four provincially licensed marine shellfish aquaculture operations (all for American Oyster) in the vicinity of Caribou and Munroes Island, which are located relatively near to the location of the proposed effluent diffuser (CH-B).*" The fact that a commercial bi-valve fisheries exists in this area and are prohibited in the "proxy" reference area is evidence enough of the dissimilarities that should warrant that specific baseline measurements are performed in the new outfall location.

In general the most glaring gaps within this proposal are the constant omissions of studies, which are cited to be due to the lack of time to perform studies or having current information

available. Within this proposal there is consistent language of uncertainty and broad assumptions made using far reaching parallels or outdated data. Given the level of concern, it is only fair that more rigour and certainty be included within this assessment up front. It is clearly stated within section 2.0 of the proposal that the only biological field studies completed were on Northern Pulp Nova Scotia premises and have not considered the pipe corridor or marine environment whatsoever. It is obvious that the proposed route and outfall location chosen in the fall of 2018, could not be properly assessed for reasons beyond the cited "*seasonal constraints and by physical opposition and obstruction*". This is no excuse for omissions of proper studies, in regards to the most vulnerable and largest impacted areas of the project. Follow-up studies are promised, however, according to a recent Auditor General report, our provincial regulator's current track record indicates poor enforcement and monitoring of these projects as they progress. We simply need more detail upfront given what is at stake here.

I strongly urge you to delay your decision on the approval of this project and demand a more thorough Environmental Assessment Report to be completed by NPNS. Within this report I would expect to see a complete and relevant HHRA, updated environmental studies and more opportunity/time for input from the local communities, First Nations, concerned citizens, and the collective Maritime Fisheries from all neighbouring provinces.

Regards,

P.Eng - Engineers Nova Scotia Member

Nova Scotia Windsurfing Association www.nswindsurfing.com



Northern Pulp Nova Scotia Corporation
 Replacement Effluent Treatment Facility
 Environmental Assessment

Site Location Map
 Figure 1.1-1



- Approximate Project Footprint Area*
- Pictou Landing First Nation
- Roads
- Approximate Outfall Location
- Wetland
- Watercourse
- Open Water
- Rail



MAP DRAWING INFORMATION
 DATA PROVIDED BY Northern Pulp Nova Scotia, GeoNova, ESRI
 MAP CREATED BY: SCM
 MAP CHECKED BY: AB
 MAP PROJECTION: NAD 1983 UTM Zone 20N



*Precise Project Footprint to be determined following completion of detailed design

From:**Sent:** Friday, March 08, 2019 10:24 AM**To:** ASKUS <ASKUS@novascotia.ca>**Subject:** Northern Pulp

Hi,

Since I had a difficult time finding the Environment department and don't know if I have the correct department, please refer to the correct department. This is the last day for comments and must be received TODAY.

Northern Pulp had four years to make changes, and did not. Our forests have been destroyed, waters polluted, animals wandering in cities due to displacement, at the hands of Northern Pulp.

This company even tried to prevent the book THE MILL from being placed in book stores, why I read it and all employees in this department should also read! A quote from GM and President of Scott Paper in the 1960s (Northern Pulp now) , "They can't believe how stupid the government of Nova Scotia is and are still laughing in Philadelphia in 2016."

If you allow effluent pumped in our waters again, we all know it will be a tragic disaster.

Northern Pulp has been given our resource and taxpayer's money for years and is concerned with profits only,
Unrestrained Capitalism at its worst! It's time to listen to us (those who vote) and I'm one of them!

Thank you

From: noreply@infogrove.com
To: [Environment Assessment Web Account](#)
Subject: Support for Northern Pulp Environmental Assessment
Date: March 8, 2019 1:13:02 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Response
Date: March 8, 2019 1:19:55 AM
Attachments: [minister letter.docx](#)

Attached is a letter to Minister Miller in regards to Northern Pulp

Thank you

Dear Minister McKenna,

I am writing to you in relation to the Northern Pulp's Replacement Effluent Treatment Facility Project. My name is _____ and I live in Caribou River Nova Scotia. My family has a history of being fishermen in this area, and currently my father, grandfather, uncle and myself are all employed in the local industry, two of whom are license owners. Combined, we own over 80 years of personal knowledge of the fisheries within the talked about area. More personally, coupled with working on fishing boats, I have been employed by multiple fisheries science organizations, including The Gulf Nova Scotia Fleet Planning Board, and the Fishermen Scientists Research Society, that conduct work throughout the Northumberland Strait. Included with my family knowledge, and personal work experience,

The Proposal by the Northern Pulp company affects me a great deal, due to my great involvement with the local fisheries in all aspects. My personal fishing endeavors, as well as all my immediately family work to make a living on the Northumberland Strait, and this proposal is of great threat to our way of life. The strait maintains a way of life for many people in this area, as we all depend on this beautiful body of water to support our lives and well being.

I would like to raise three separate points as to why I object to the pipe proposal, first of which would be the whole idea of pumping this so called treated effluent directly into the marine environment. Living in and fishing in this area for my entire _____ life, I have observed that the proposed area of discharge is subject to extremely strong tidal flows. The theory behind changing proposals, as stated on page 33/34 is that the Pictou harbor area was not selected because it did not have enough tidal flows and that nutrients etc. could build up in the harbor and over time become harmful. The key here to me, are the words over time. This means that these chemicals in certain amounts are harmful, because over time they would accumulate. This statement also applies to the proposed outfall, because even though the area is subject to more tidal flow, therein lies the problem. The tide will go out and move the effluent and mix it, but then what will happen when the tide comes back in? This tidal flow can be confirmed, because whenever we are fishing, and someone loses a buoy, marking where their traps are located, it can normally be found further along the shore, by another fisherman, or even on the beach by a passerby. The tide coming in will already have the effluent in it and be subject to accepting more effluent from the pipe, and therefore, will start to accumulate, essentially causing the same problem that northern pulp was trying to avoid with the change of outfall location. Throughout the entire document, Northern Pulp only mentions the term Bioaccumulation once, and that's in the definitions page, at the very first of the report. This to me, is blatant ignorance. With increased nutrients in the water column, and to think the effluent will not make its way to the top of the water column is ludicrous, the process of photosynthesis will take in those extra nutrients will therein be passed along the food chain and be biomagnified. This will lead to the eventual time when the nutrients will be too high and become harmful, and they will already be passed through the entire food chain. This idea can also be visualized more clearly if you take into the consideration the suspended solids within the effluent. On page 84 in table 5.6-1 Of the report, it claims that there will be 4.8 grams/liter of effluent. If this is pumped at the maximum of 85,000 cubic meters per day, this would equal out to be over 4 tons of suspended solids per day. Where will those suspended solids go? Do they disappear? This process will not just stay in the

immediate outfall site, pumping such a large amount of effluent will begin to displace the water already occupying that space, and the affected area will begin to grow, magnifying these adverse impacts to a much greater area than is indicated in the Northern Pulp document. This relatively simple concept is a blatantly overlooked by northern pulp, who seem to be employing the "tides will take the effluent away and then it won't be our problem anyway" and that is just unacceptable. In this day and age, to have such a close-minded approach is disastrous, and I am not willing to put my future way of life into the hands of an organization so blinded by reality.

Secondly, I would like to raise an issue with the effluent itself, that being the proposed temperature of the effluent when it exists the pipe. On page 46 of Northern Pulp's report, is the table that comprises of the anticipated daily maximum effluent water quality. In this table it states that the temperature of the effluent will be 37 degrees Celsius in the summer, and 25 degrees Celsius in the winter months. This is just too warm. It is unacceptable to be pumping anything into the Strait at this temperature, as it can be extremely harmful to the ecosystem. There was a study conducted on the ambient temperature done by the Gulf Nova Scotia Fleet Planning Board in 2017, where the sent-out temperature probes throughout the Strait, from April to late fall, and throughout that entire time, there was not a single temperature recorded that was above 23 degrees. This includes the height of summer. (these probes were on the sea floor and not the water's surface.)¹ This means that the effluent emitted from the pipe is at least 10 degrees warmer on average. It doesn't take a scientist to figure out that water with a 10-degree difference is vastly different and could potentially cause a lot of problems. I believe there is not sufficient research on the potential impacts to the lobster populations with relation to temperature. Appendix R in Northern Pulp's report consistently cites a paper from the 1960's that deals with lobster larvae exposure to effluent. Would it not be better to do some updated research on the subject? Also in appendix R, its stated that larvae as well as adult lobsters will be unaffected within a certain distance from the diffuser? How can this be? will there be a fence holding all the effluent in? introducing a constant flow into the area will permanently change the makeup, and this will be a constantly changing number? Eventually that 2-10 meters could be 2-10 miles? How do we know for sure? There is very little research conducted in this area. This effluent is not going to stay in one spot, and will spread like a disease, and I'm not willing to risk that disease killing off one of the most commercially important fisheries in the province.

My last point that I would like to bring up, would be section 4, on page 25/26 where it states that Northern Pulp would not be able to remain competitive. This is a very loose term, that being competitive. What exactly does that mean? Does that mean that they immediately lose money and would have to shut down? Or simply mean that their profit would not be the same as it would be with the current pulp it produces. In that section it cites appendix B. Upon reading that appendix, it claims high wood use as well as electrical costs would make it not viable for their company. This seems to be very misleading, because after a quick google search of Northern Pulp's own website, they claim to be almost entirely self-sufficient, because they use their own power generation facility to produce 90% of their electrical needs.² So, which is it? Seems that citing electrical costs as a means of not being able to switch to a different product and change operation systems, is a round about way of saying they won't make as much money, because they only pay 10% of their electricity in the first place. It would not appear to be very good business practice if paying for more than 10% of your electricity consumption would cause the business to close. It appears to me, that looking at changing products and systems for the

Northern Pulp Mill Is more a matter of unwillingness based on very grey area terms, versus an idea that it is not possible.

Based on these three points,

- 1) The tides providing lasting impacts that can cause the toxins to spread and become bioaccumulated and potentially toxic over time
- 2) The potential threat to lobster fisheries and other fisheries due to the extremely elevated temperature of the effluent, coupled with the lack of research into the fisheries and the impact this project could have
- 3) The shady reasoning provided by Northern Pulp that they have investigated other options

I think a decision such as this should be forwarded to the federal government. The province should be willing to defer the decision making process, because it affects people that are not in their jurisdiction to begin with, coupled with the idea that such an important decision should be more thoroughly looked at, and not just a 30 day assessment when there is the possibility for much more research to ensure the well being of not only hard working people but also ensure that the animals and creature of the Northumberland Strait are safe and are able to thrive in their natural habitat. This request is not only founded on it being a big decision, but in fact that the Government of Nova Scotia has been helping fund the design and planning for this project, and that, therefore, would be a conflict of interests and hence the decisions should be handed over to the Federal Government.

- 1) <https://fleetplanningboard.ca/wp-content/uploads/2017/10/Temperature-report-2017-.pdf>
- 2) <http://www.paperexcellence.com/npns-operations-today>

From:
To: [Environment Assessment Web Account](#)
Subject: Previous email
Date: March 8, 2019 2:43:36 PM

Hello, last night you received a letter from me and in in that letter it is directed to a minister mckenna. I can assure you that was a mistake and the letter is actually directed towards minister Miller. Thank you.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 1:31:08 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
 @unifor2002.org)

Saint John, NB

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 2:57:17 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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Thank you.

Signed by:

@icloud.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 2:59:12 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
 @easlink.ca)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 6:37:44 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Pictou co and the province need this to work

Signed by:
@hotmail.com)

From: @hotmail.co.uk
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 8:23:02 AM

Project: replacement_effluent_treatment_facility_project Comments: I am seriously opposed to any further extensions to northern pulp . They have been given enough time to fix their problem . The present government must stand up for the environment and the good of all Nova Scotians . The common people must be given back hope that the government is not a run by big corporations . Please review the Lahey report again and again. Name:
Email: @hotmail.co.uk Address:

Privacy-Statement: agree x: 69 y: 27

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 8:29:36 AM

Project: replacement_effluent_treatment_facility_project Comments: I believe the proposed replacement effluent treatment facility project will cause irreparable damage to our fragile Northumberland Strait. I worry about our fishing industry, our tourism, my home, our health, and all the species that live in the waters here. Please do not allow Northern Pulp to endanger our precious area. Name: Email: @gmail.com

Privacy-Statement: agree x: 42 y: 22

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 8:35:00 AM

Project: replacement_effluent_treatment_facility_project Comments: This mill after 50 years of cause pollution and illness in pictou needs to be closed. This application should be rejected for the following reasons:
• Partially treated effluent is not acceptable for the otherwise pristine waters of the Northumberland Strait. The present effluent from Boat Harbour is already beyond acceptable, and I understand that the suspended solids in the proposed effluent will be even higher than the present Boat Harbour situation.
• Pumping partially treated effluent into the Northumberland Strait has the potential of contaminating the waters of five of Canada's provinces.
• The fisheries at stake in these five provinces are too valuable to be put at risk. There are so many pieces of legislation that should prevent this mill from polluting, but all have failed. No wonder people have so little faith in the system. Name:

Email: @hotmail.com Address:

: Privacy-Statement:

agree x: 54 y: 22

From: @glinx.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 8:53:26 AM

Project: replacement_effluent_treatment_facility_project Comments: It seems to me that given the enormous amount of controversy surrounding the effluent pipe and Northern Pulps proposals, that there only two options open to the government: to undertake or have undertaken the most detailed,high-level, wide-ranging, publicly transparent, intensive environmental assessment possible, including a federal assessment, or to shut down the Mill. There is no need for extending the deadline, since much data is already available,and the problems have been known about for years, without effective action. Name:

Email: @glinx.com Address:

Privacy-

Statement: agree x: 44 y: 27

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 9:09:57 AM

Project: replacement_effluent_treatment_facility_project Comments: Please do not pump this effluent In to the ocean. It is not economically or socially responsible. The costs will be great and your only hope, which is no hope at all is that you will die before the repercussions are over whelming. Think Name: Email: @gmail.com Address:

: Privacy-Statement: agree x: 74 y: 20

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp 's Replacement Effluent Treatment Facility Project
Date: March 8, 2019 9:10:15 AM

Dear Minister

I am writing this note in regards to Northern Pulp's Replacement Effluent Treatment Facility Project.

Our family are proud Nova Scotians with strong connections to Pictou and Pictou Island for many generations. Three of our four children are currently raising families in this wonderful province. We want them to remain in a province that respects the environment , the people , the forests and their the marine species that are part of the food chain.

We are proud that the current government has recognized the damage to Boat Harbour caused by the effluent from Northern Pulp. We applaud the government's commitment to righting this wrong.

Two wrongs however do not " make a right". The planned process to discharge Northern Pulp's effluent in to the Northumberland Strait is wrong. The current and future health and safety of people , marine life and the environment must have the greatest weight in the decision making process.

How can a daily dump of nearly 100 million litres of effluent, of unknown composition, not have a negative impact? How could any additional toxins in our environment and food chain be deemed safe in a globally warming environment? What is the risk assessment associated with constructing and maintaining a 15.5 km pipeline going overland and then through Caribou Harbour ? Why do we as a province continue contributing to the all the questionable decisions that have allowed the Northern Pulp Mill to begin and continue operations ?

The Class 1 Assessment is not adequate.

Please support those impacted directly and indirectly by the closure of Northern Pulp to develop new opportunities that support the recent sustainable forestry report released by the government.

Please give us reason to continue to be proud Nova Scotians who encourage our children to raise their families here , contribute to our economy, sustain our fisher heritage, protect our natural resources and support sustainable industries that protect our future. Please allow us to be proud of the principles and values of this government that become evident in your decision making process.

Thank you for your consideration.

Wife of a fisher
Mother of a fisher
Mother of four children who have grown up in Kentville , Town of Pictou and Pictou Island
Friend of many fishers and pulp mill workers
Grandmother to little children whom I hope and pray can be proud of their Pictou Island, Pictou County and Nova Scotian heritage and what we leave behind in this world

Sent from my iPad

From:
To: [Environment Assessment Web Account](#); CEAA.BoatHarbour.ACEE@canada.ca; Sean.Fraser@parl.gc.ca
Subject: Mercury not addressed in the Northern Pulp EA
Date: March 8, 2019 9:20:08 AM

Hello Premier McNeil, Minister Miller, and Mr. Fraser,

I have concerns around the construction of NPNS's proposed new ETF next to the former Canso Chemicals plant could disturb the mercury remaining at the site and lead to its spread in the environment, now or in the future.

The Canso Chemicals property is known to be contaminated with mercury. It contains "on-site secure landfills" built between 1992 and 1999. The landfills contain free mercury from contaminated soils as well as mercury-contaminated materials generated from the demolition of the old Canso Chemicals buildings. Mercury is also known to have seeped into bedrock on the site.

Mercury is an environmental toxin which is persistent and bio-accumulative. It does not "go away" and can build up in the environment and in the food chain. There is no known safe level of human exposure to mercury.

Plans for Northern Pulp's new ETF show that the clarifiers and the activated sludge basins with depths of seven metres and greater would sit very close to the former Canso Chemicals site. There is a possibility that mercury from the contaminated site could seep into the treatment system and end up in the sludge that will be burned, or in the effluent released into the Strait.

The EA submitted by NP does not address any of these serious health risks. This proposal should not be approved as it stands now based on the serious risk presented to the people and the environment.

Thanks



Toxins



Krill

Mercury level



From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 9:38:40 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by: _____
@enbridge.com)

ON

From: @bellaliant.net
To: [Environment Assessment Web Account](#)
Cc: [@bellaliant.net](#)
Subject: Registration of Undertaking - Northern Pulp - Written Comments Submission
Date: March 8, 2019 9:40:12 AM

Good Day,

After reading a few of the articles in the Chronicle Herald in respect to Northern Pulp's (NPNS) registering their EFT project - and with a diffused discharge of upward of 60 million litres a day of treated effluent to be discharged into the Northumberland Strait.

I have, as a resident living on our one and only ocean, in another region of the province on the Eastern Shore within the noted MPA, a few concerns and questions please.

Please note... I am no way an expert on the subject - just a concerned citizen.

1) If Dillon Consulting, EcoMetrix Inc. and NPNS are confident in the effluent NOT having any significant impact on the ocean bed and species of marine life - of not being affected; are these people willing to put their words where their mouth is - ie.

They (EcoMetrix Inc.) having performed lethality tests on Rainbow Trout by placing 10 trout in a bucket of pure treated effluent and determining the effluent to be deemed safe as it were, if half of the 10 trout did not die within 96 hours.

So the question comes to mind... are they willing to drink, let's say a half dozen glasses of this effluent to prove they are correct...is anyone who has this opinion of the treated effluent willing to drink glasses of this effluent? We are expecting our fish on and off our shorelines to be okay with it. So did British Columbia years ago and then reporting how many Salmon were affected with cancer in the Fraser River later on.

2) Have we, as a province contacted someone such as Dr.Boris Worm - Marine Ecologist and Killam Research Professor at Dalhousie, a speaker on CBC radio - along with being a scuba diver himself...

Have we asked for a non biased educated opinion of someone such as him - if not perhaps we should !!

3) Are we as a province educated enough to make the final decision that the fish, lobster, any marine habitat for that matter that is fished and with having this food put on our tables 100% confident that this end product will have no significant impact on our health. Are we prepared for future lawsuits?

I for one, who each year few times purchase lobsters in Pictou with other family members...will no longer be doing so.

I am a two time breast cancer survivor who was advised by Oncologists that with no cancer in my family and at the time notably being subjected to chemicals - this was a primary reason of the cancer.

This is also chemicals you are willing to put in our ocean.

4) Is there no way at all this effluent that is discharged daily - can it not be recycled - for the lack of a better phrase - is it possible for the plant to filter, recycle etc. this effluent and reuse it themselves. Has this option been scrutinized at all?

These are my thoughts and questions as a resident and concerned citizen of our beautiful province.

Just trying to keep it that way.

Thank you for time,

From:
To: [Minister, Env; Environment Assessment Web Account](#)
Cc: office@antigonishmla.ca; ec.ministre-minister.ec@canada.ca; Sean.Fraser.C1@parl.gc.ca
Subject: Northern Pulp Treatment Facility Replacement Submission Comments
Date: March 8, 2019 9:48:09 AM

Dear Minister Miller

I would like to ask that you, read this message and respond with next steps your Department is prepared to take to protect our Northumberland Strait's ecology, the livelihoods in three provinces that are dependent on it and our future oceans health. I would also ask that those copied read this correspondence being my local MLA, Randy Delory, our Federal Minister of Environment, the Honorable Catherine McKenna responsible for our oceans and my local MP Sean Fraser.

There are many aspects to this submission that I am uncomfortable with. First of all the timelines have been pushed and pushed to the point that the urgency has created a atmosphere of confusion based on quick responses by Northern Pulp which do not adequately address the environmental concerns that need to be addressed. There is critical data that I feel is not available to ensure we and our strait are properly protected from this waste. The waste has been determined by Northern Pulp to be "acceptable" and in fact this is a better solution than the existing process. The make up of the waste has not been clearly identified and mention of mercury has been suppressed if not avoided. This is only one toxic substance that must be thoroughly investigated as to the effect on the health of the Strait as well as the local community and those consuming the sea food from this area. Long term effects are not mentioned. Broad based terms such as "acceptable" and "minimal" do not do this toxic stew credit. We cannot accept the risk of damage to our lobster and other sea creatures in larval and adult forms, without a clear and concise path of study without ambiguity. It is unfortunate that Northern Pulp has waited this long to correct the Boat Harbour waste disposal process and the people of NS should not be held accountable for their lack of response over the past several years. In some ways I also hold the NS Government responsible in lack of urgency many years ago and letting this environmental disaster get to this point. We must now pit those supported by the plant to the industries dependent (in three provinces) on the Strait's health. I find the submission is fraught with ambiguity and essentially written with bloated text to disallow proper assessment over the 30 day period allowed. The whole idea of dumping this waste directly into the Strait flies in the face of what our Federal Gov't has committed only recently. Recall the quote by Jonathan Wilkinson, Minister of Fisheries, Oceans and the Canadian Coast Guard:

“The health of our oceans is in danger and the time to act is now. Hundreds of thousands of Canadian jobs rely on sustainable oceans. Our Government is working with our international partners, including those in the G7, to combat illegal fishing, support ocean science, and tackle marine plastics. This way, we can protect our beautiful coasts and build prosperous, stronger, and more resilient coastal communities. Healthy oceans mean a healthy, thriving and growing Canadian economy.”

It is important to restate, healthy oceans mean a thriving and growing Canadian economy. We need more protections for our coasts, and not allowing a toxic stew to be dumped directly in the Strait will go towards achieving this. Sustainable economies do not base themselves on an unending attack on our natural resources. The NS Government needs to look at different approaches to grow our economy.

I feel that it is the responsibility of the NS Government to take all the precautions necessary to protect our environment and marine industries. If you do not do this who will? Given the above it is in the interests of the populace at large, the environment that cannot speak for itself, and our fellow Canadians in NB and PEI that the Proposal be rejected and continue on the path of closing the existing treatment facility.

Kind regards

From: @dal.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 10:04:11 AM

Project: replacement_effluent_treatment_facility_project Comments: March 8, 2019 IN RESPONSE TO: Dillon Consulting Limited 2019. Northern Pulp Nova Scotia environmental assessment registration document: replacement effluent treatment facility.
<https://www.novascotia.ca/nse/> Prepared by

Dalhousie University. Professor.
Department of Community Health and Epidemiology, School for Resource and Environmental Studies, Rowe School of Business Dalhousie University. Assistant Professor. School for Resource and Environmental Studies. *Explanation of key topics provided below, when comments become available for public viewing. Dear Honourable Margaret Miller, Minister of Environment, The following is a response to the misrepresentation put forth by Northern Pulp's Environmental Assessment EA of the scientific contributions our study, Pilot study investigating ambient air toxics emissions near a Canadian kraft pulp and paper facility in Pictou County, Nova Scotia Hoffman et al. 2017, provides. We would appreciate that you consider our rebuttal. This was a "pilot" study as indicated by the title and subsequent sections of the study therefore, it was not meant to provide causal evidence to implicate the presence of airborne VOCs as solely emanating from Northern Pulp "the mill", as the EA suggests. Nevertheless, we were interested in documenting VOC-related air quality in the vicinity of the mill, given that pulp mills are present across rural Canada. Publicly accessible Environment and Climate Change Canada ECCC data VOC concentrations [Granton NAPS ID: 31201, located southwest of the mill], and local meteorological conditions [Caribou Point] <http://climate.weather.gc.ca/climateData/http://maps-cartes.ec.gc.ca/rnsps-naps/> were examined using temporal 2006-2013 and spatial analytic methods to investigate prioritized air toxic ambient VOC concentrations near a pulp plant to determine whether these emissions concentrations were in the range of US EPA air toxic levels EPA 2015d <https://www3.epa.gov/ttnamti1/files/ambient/airtox/nattsworkplantemplate.pdf>. Results highlight associations with wind direction and the Granton NAPS site's ambient VOC concentrations in relation to the location of the mill. Compared to all other wind directions, prevailing winds from the northeast and the mill typically resulted in higher VOC concentrations for all compounds, except carbon tetrachloride, suggesting that the mill is likely a contributor to increased concentrations however as stated in the study, the origins of VOCs are "inconclusive", and "other local sources likely contribute to air toxics emissions". The mill's EA states that "[this study] did not attempt to rule out contributions from other potential sources of VOCs in the area", which is clearly not a true statement - other potential local emission sources were discussed in detail in the publication. Figure 1, for example, is a map displaying other local point source emitters in the community e.g., tire manufacturing facility, coal-fired thermal electrical generating station. VOCs 1,3-butadiene, benzene, and carbon tetrachloride routinely exceeded EPA air toxics-associated cancer risk thresholds, regardless of whether the mill contributed to these VOC levels, and is a significant finding that warrants further investigation. The EA's statement: "When other study uncertainties are considered [?] there is no current air quality issue with the seven targeted VOCs in the Pictou County area" is misleading. Due to the limited number of sampling sites, the problem with the location of the sampling site in relation to the location of the mill, and the short duration of our study, we explicitly identified the need for further investigation on this question. As commonly identified by environmental researchers, absence

of evidence is not necessarily evidence of absence. Therefore, the limitations caused by sparse data does not necessarily mean there is no problem with air emissions in this community and there is no justification for this erroneous conclusion, as stated in the EA. The EA statement, "The seven VOCs are not known based on literature review to be associated with pulp and paper mill activities and air emissions to any significant extent", is both unclear and undefined. Furthermore, the EA does not specify how the literature was reviewed/cited to support this statement. According to the mill's own self-reported NPRI report in 2012, 143.18 tonnes of VOCs were atmospherically emitted on-site ECCC 2012. An estimated 3.195 tonnes of benzene were released to the air from a stack higher than 50 m and 0.022 tonnes were released within 50 m of the ground. Benzene can combine with chlorinated hydrocarbons associated with the Kraft bleaching process to form a range of toxic compounds which can be volatilized. Although trichloroethylene, tetrachloroethylene, and carbon tetrachloride were not officially reported to have been released by Northern Pulp, these VOCs may become airborne through evaporation from pulp and paper wastewater Soskolne and Sieswerda 2010. Boat Harbour the mill's effluent treatment facility may therefore contribute to ambient concentrations of VOCs. The major chlorinated hydrocarbon emitted into the air from bleached kraft pulp mills of concern is chloroform, which is produced by heating a mixture of chlorine and either chloromethane or methane EPA 1985. However, we address other local and area sources which likely contribute to the observed VOC concentrations, which warrants further investigation. We note that direct links between 1,3-butadiene and vinyl chloride with pulp and paper industries have not been reported in the scientific literature to date. With regards to the EA statement, For the carcinogenic inhalation TRVs that were applied, the authors did not adjust these values from the default USEPA target cancer risk level of 1 in 1 million to the target cancer risk level that is current public health policy in Nova Scotia and most other provinces i.e., 1 in 100,000. Thus, the TRVs for carcinogens cited in the paper should have been ten times higher than indicated. This correction would alter the conclusions of the study substantially in that for the seven VOCs considered, there would be no to negligible exceedances of the TRVs that were applied", their proposal is not relevant given that Health Canada has no formal standards for air toxic emissions, and we were not looking at environmental remediation sites only background community concentrations. In contrast, the US NATA process is based upon a 2005 scientific risk assessment process well laid out by EPA which established the cancer risk levels to which the ECCC data were compared Hoffman et al. 2017. Furthermore, it should be stated that our study was published in an excellent, internationally-recognized environmental science peer-reviewed journal Environmental Science and Pollution Research and met the journal's quality control standards. To reiterate the value of this study: "Despite study limitations, this is one of few investigations documenting elevated concentrations of certain VOCs air toxics to be associated with pulp and paper emissions in a community. Findings support the need for more research on the extent to which air toxics emissions exist in pulp and paper towns and contribute to poor health in nearby communities." Various recommendations were put forth to improve the rigor and validity of the present study e.g., a field component consisting of real-time measurements of ambient air toxics a comprehensive risk assessment to investigate uncertainties that have implications for risk estimates in the present study. Furthermore, we addressed various limitations and gaps in air quality monitoring, not only locally but nationally, and provided recommendations how air quality management could be improved to support informed public health decisions e.g., epidemiological research of human exposures to air toxics emissions in the ambient Pictou environment with appropriate considerations, as outlined more strategically placed air monitoring stations evaluation of a wide-suite of air toxics - topics ECCC and applicable stakeholders should consider. To the contrary and to our surprise, the Granton NAPS station has been decommissioned. This information vacuum only

emphasizes the need for more research on these questions. In summary, the intent of this pilot study was to address local air quality conditions in a Nova Scotia rural community, which clearly indicates the need for further investigation. Moreover, this pilot study serves as a precursor to gaining awareness, so that government agencies adopt more stringent air quality regulations and monitoring programs to ensure health of all citizens is safeguarded and prioritized.

*Explanation of key topics Hoffman et al. 2017: "There is growing concern about the toxicity of volatile organic compounds VOCs Cicolella 2008, their presence in air, and the consequences of long-term, low-dose exposure to these agents. Airborne VOCs are varied and widespread pollutants e.g., hydrocarbons, aromatics, and some chlorinated compounds and are increasingly recognized as important precursors to PM_{2.5} and ground-level O₃ formation through photochemical reactions Ryerson et al. 2001. Many VOCs are included in the US Environmental Protection Agency EPA air toxics list. "Air toxics" are defined as "those pollutants that cause or may cause cancer or other serious health effects [?] or adverse environmental and ecological effects" EPA 2015a. "Ambient air monitoring in the US is conducted in accordance with the Clean Air Act CAA Clean Air Act 1970. CAA amendments identify 187 air toxics, which form the basis for EPA's approach to regulating emissions EPA 2015a. Of these, EPA identified 30 air toxics that pose the greatest potential health threat in urban areas EPA 2015b. Using the risk-based principles outlined in CAA, EPA developed the National Air Toxics Assessment NATA, a comprehensive evaluation tool that prioritizes efforts to regulate emissions of air toxics EPA 2015c. Such a rigorous initiative has not been implemented in Canada, where no federal guidelines exist for ambient air toxics. Yet, some of these air toxics, as noted in our publication, have been identified as associated with increased risks for chronic disease. See, for example, Paul Villeneuve et al. 2013 <https://www.ncbi.nlm.nih.gov/pubmed/23369806> which showed an increase risk of cancer mortality associated with elevated ambient air benzene concentrations in urban Toronto. "NATA calculates concentration and risk estimates from a single year's emissions data. The risk estimates assume a person breathes these emissions each year over a lifetime or approximately 70 years. NATA only considers health effects from breathing these air toxics. It ignores indoor hazards, contacting or ingesting toxics, and any other ways people might be exposed." <https://www.epa.gov/national-air-toxics-assessment/nata-overview> "The National Air Pollution Surveillance NAPS program was established to monitor and assess ambient outdoor air quality at various urban and rural areas across Canada. This program focuses primarily on the criterion air pollutants nitrogen dioxide, ozone, PM_{2.5} and sulphur dioxide. Several EPA-designated air toxics are routinely quantified in Canada however, at a subset of NAPS monitoring sites. "VOCs selected for analysis in this investigation were based on EPA's list of 30 urban air toxics EPA 2015b and National Air Toxics Trends Station Work Plan Template EPA 2015d. Therefore, this investigation represents one of the few peer-reviewed published studies on record about airborne VOCs in rural Canada. References: Cicolella A 2008 Volatile organic compounds VOC: definition, classification and properties. *Rev Mal Respir* 25:155-163 Clean Air Act 1970 Clean Air Act, SS 1986-87-88, c C-12.1. <http://www.canlii.org>. Accessed 5 Oct 2015 Environment and Climate Change Canada ECCC 2012 Facility substance information. <http://www.ec.gc.ca/>. Accessed 29 March 2015 Hoffman E, Guernsey JR, Walker TR, Kim JS, Sherren K, Andreou P. 2017. Pilot study investigating ambient air toxics emissions near a Canadian kraft pulp and paper facility in Pictou County, Nova Scotia. *Environmental Science Pollution Research International*. *Environ Sci Pollut Res* 24:20685-20698. doi:10.1007/s11356-017-9719-5 Ryerson TB, Trainer M, Holloway JS, Parrish DD, Huey LG, Sueper DT et al 2001 Observations of ozone formation in power plant plumes and implications for ozone control strategies. *Science* 292:719-723 Soskolne CL, Sieswerda LE 2010 Cancer risk associated with pulp and paper mills: a review of occupational and community epidemiology. *Chronic*

Dis Can 29:86â?"100 U.S. Environmental Protection Agency EPA 1985 Survey of chloroform emission sources. <http://www3.epa.gov/>. Accessed 15 Oct 2015 EPA 2015a About air toxics. <http://www3.epa.gov/>. Accessed 18 Oct 2015 EPA 2015b Urban air toxic pollutants. <http://www3.epa.gov/>. Accessed 21 Sept 2015 EPA 2015c National air toxics assessments. <http://www3.epa.gov/>. Accessed 21 Sept 2015 EPA 2015d National air toxics trends station work plan template. <http://www3.epa.gov/>. Accessed 16 Oct 2015 Villeneuve PJ, Jerrett M, Su J, Burnett RT, Chen H, Brook J et al 2013 A cohort study of intra-urban variations in volatile organic compounds and mortality, Toronto, Canada. Environ Pollut 183:30â?"39 Name:

Email:

@dal.ca Address: Municipality:

Privacy-Statement:

agree x: 87 y: 19

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 10:15:36 AM

Project: replacement_effluent_treatment_facility_project Comments: It is soon time for those responsible for the stewardship of our planet aka governments to realize that as a very wise man once said "You cannot eat money". Name: Email:
@ns.sympatico.ca Address: : Privacy-Statement: agree
x: 51 y: 9

From: @cfifinance.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 10:27:56 AM

Project: replacement_effluent_treatment_facility_project Comments: To Whom It May Concern: I am writing to express my strong support for Northern Pulp Nova Scotia in its efforts to build a new effluent plant and in support of their request that they be given an adequate extension beyond the time-line in the Boat Harbour Act to allow them to complete this task without a shutdown. I have been in the finance business servicing the forestry, transportation and construction sectors for over thirty years and am also a woodlot owner. I am very familiar with the amount of economic activity generated by a mill such as Northern Pulp. The forestry industry in Nova Scotia is very integrated with each part of it depending on the other. Northern Pulp provides the largest market by far for the by-products of our lumber mills which depend on these sales for their very survival. Northern have also been very beneficial to small woodlot owners. When a person does intensive forest management, commercial thinning, etc. and removes low quality wood, Northern Pulp provides a market for that product, so the landowner can afford to do that type of forest improvement. They provide a market for our low-quality wood at a fair price. They also provide access to silviculture funding for land owners. Northern Pulp in not only a driver of our forestry industry and our rural economy, it is a driver for all of Nova Scotia. They are the largest single customer of the Port of Halifax accounting for roughly 40 of the port business. Without the volume of forestry related freight going out there will be a lot less incentive for ships to come in so it is easy to see that the economic spin-off from this operation is as important to our urban economy as it is to the 100's of rural communities that depend on the forestry industry. Without this pulp mill, a number of sawmills in NS will be forced to shut down and the demand for our forestry products will collapse and in turn, so will the prices for them. Without viable markets our forestry contractors and truckers will be bankrupted, and our woodlot owners will have no economic incentive or financial resources to manage their land properly. Forest land will be devalued. The jobs from this industry create tax dollars that are much needed to support the demands of Nova Scotians for better health care, education and infrastructure. As a Chronical Herald article once said, "you can't build an economy off of whale watching and BB's." To be prosperous our economy needs industry that actually creates wealth. No one, including myself, argues with the fact that there needs to be a new more efficient effluent plant and that the current practice of dumping that waste in Boat Harbour must stop. That being said, Northern Pulp didn't create this situation. They inherited it not 10 years ago when they purchased the mill, a purchase made on the basis there being a lease of the Nova Scotia government owned effluent plant in place until 2030. Since their purchase, they have vastly reduced emissions from the mill largely at their own expense. They are attempting to build a state-of-the-art treatment facility that will replace Boat Harbour with an unreasonable, arbitrary deadline while being fought every step of the way by various interest groups. In summary, Northern Pulp is critical to the survival of our forestry industry and its closure would also be a very substantial body blow to our economy as a whole. If the Boat Harbour effluent plant is unavailable it cannot go on hot idle as Stora did when it ran into difficulty. If this plant shuts down, even for a short time, it is done. After 30 years of effluent going into Boat Harbour, the incremental harm done to the environment by an extension to allow Northern Pulp the required time for the environmental review, permitting and construction etc. does not justify making this mill close. Northern Pulp needs to be given the time needed to navigate the process and to finally build and commission this state-of-the-art effluent plant and be one of the long term economic drivers our economy needs and be able to continue to

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 10:53:53 AM

Project: replacement_effluent_treatment_facility_project Comments: I strongly support giving Northern Pulp an extension to construct their treatment facility. They currently meet or exceed current regulations and the new facility will improve the effluent. The province needs more wealth producing industries that employ highly skilled, well paid Nova Scotians and all the supporting jobs and industries. We all consume products made from Kraft pulp every day, tissue, toilet paper, paper bags, diapers, paper, etc.so why would we not benefit from this plant. There are many hundreds of such plants in the world, the closest in the middle of Saint John, New Brunswick, they all have an odour and they all have an effluent flow, many discharge into lakes and rivers and most are much larger than this mill. Canada has some of the toughest environmental regulations in the world. I agree Boat harbour should be shut down, lets stop complaining and move forward and solve this. Name: Email:
@eastlink.ca Address:

: Privacy-

Statement: agree x: 55 y: 26

From:
To: [Environment Assessment Web Account](#)
Subject: NORTHERN PULP NOVA SCOTIA ENVIRONMENTAL ASSESSMENT REGISTRATION DOCUMENT Replacement
Effluent Treatment Facility
Date: March 8, 2019 10:56:47 AM
Attachments: [20190308 EA SubmissionPDF.pdf](#)
[CaribouShipGroundingsAndWrecks20190305.pdf](#)

Attached please find my submission requesting there be no pipeline emptying into the Northumberland Strait or Caribou Harbour. In addition, my details for the research I've done confirming 22 ship groundings and wrecks in Caribou Harbour and environs.
Thank you



Virus-free. www.avg.com

NORTHERN PULP NOVA SCOTIA ENVIRONMENTAL ASSESSMENT REGISTRATION DOCUMENT

Replacement Effluent Treatment Facility

Public Input Submission

Contact Information:

.(Health Education)

[@gmail.com](#)

Firstly, I acknowledge the economic benefits Northern Pulp brings to the community, volunteer sector and non-profit groups. For 22 years, I have called Caribou Island my home. Within my line of vision in the harbour, I see Farming, Fishing (sport and commercial), Forestry, Tourism, and Active Living co-existing and integrated. I do not see the Northern Pulp pipeline and outfall as compatible with the highest and best use of Caribou Harbour and the Northumberland Strait. The “quality” of the partially treated effluent is by Northern Pulp’s admission not expected to be an improvement from that of Boat Harbour i.e. temperature, salinity, TSS etc. The elements that are not treated onsite at the proposed ETF will still be at polluting levels in the pipeline for example BOD’s and then dispersed in the Northumberland Strait by dilution and will negatively impact the Marine environment. There is no indication that pipeline leak prevention monitoring is different from Boat Harbour – visual. For damage by ice, ice scour, or malfunction from sediment, the diffusers will be checked by divers but no frequency is indicated other than annual. **To come into a sensitive ecosystem with minimal monitoring is unthinkable.** As to air emissions, there is inadequate information as to the new sludge burning in the power boiler at maximum production, the emissions and the impact to existing scrubber? Precipitator? capacity. More recently, a significant methyl mercury contamination is reported to exist adjacent to the proposed replacement ETF. There is not enough clarity about heavy metals and the potential health impacts.

I request that the Caribou option be rejected by the Honourable Minister because of the significant environmental effects that can’t be mitigated:

Please note that the map used in the Executive Summary does not show Gull Spit as a notable geographic feature. The Canadian Hydrographic Services nautical chart used by Makai Engineering in Appendix F, Figure 1 shows only half of Caribou Harbour but does indicate the presence of Gull Spit which relates to the **narrow silting harbour entrance**. A nautical chart shows water depths, land elevations, North orientation, marshlands, tidal information, watercourse feeding Caribou Harbour. **I request that the Honourable Minister and any other reviewers of the application be made aware of what appears to be an oversight in the Executive Summary as it could impact one’s understanding of the significance of Gull Spit to the harbour flushing capacity and sedimentation.** Without Gull Spit noted, the map in the Executive Summary implies a wider harbour entrance.

The ferry channel is dredged regularly due to sedimentation. A May 2008 Transport Canada report about the most recent ferry dredging is found at: <https://www.canada.ca/en/news/archive/2008/05/federal-government-improves-caribou-nova-scotia-ferry-terminal.html>. The proposed NP pipeline marine portion of the 15.5 km route would run parallel to the ferry channel. In pipeline construction, 4.1 km of a trench 3 metres deep and 10 metres wide would increase sedimentation in the harbour and off of Caribou Point. The description of armour stone to cover the proposed pipe could also change the sediment patterns in the harbour and off of Caribou Point : creating a new artificial “reef(s)” that crosses the harbour perpendicular to the harbour entrance and then parallel to the Caribou Island south shore. Gull Spit at the harbour entrance is a significant feature as is the Nature Preserve, Munroe’s Island (opposite Gull Spit) which is part of the Caribou Provincial Park. Approximately 30 years ago, the Little Caribou Entrance to the harbour was still open but is now connected to Caribou Park because of sedimentation. The modelling in the Receiving Water Study which used July 2016 conditions shows that outfall effluent would be inside the harbour. (*Appendix E1-E2 Figure 2.11 CHB Discharge Simulated Effluent Concentration for Typical Tide – Slack High Tide at 11:00 July 22; Figure 2.12 CHB Discharge: Simulated Effluent Concentration for Typical Tide – Ebb Tide at 1400 July 22*) Yet in the application, there is no mention of the flushing capacity of the harbour. A mussel farm license was rejected approximately 18 years ago due to inadequate flushing. **Effluent sediment in Caribou Harbour would impact /reduce / eliminate prospects for existing and future non-polluting socioeconomic development.** To add another source of sediment in the harbour and environs is short-sighted and an avoidable negative impact. The impact of the 25-37 degree effluent as a 15.5 km thermal heat pump isn’t addressed nor is the broad impact of cooling effluent in the strait and the currents created or altered by the diffusers and the temperature differential of the effluent and the receiving waters. Whether property sellers on the harbour would need to highlight effluent as one of the disclosure items has not been addressed and neither negative property value and tax base impact nor the quiet enjoyment of current owners.

In addition to the fishers who are based at the Caribou wharf, **Caribou Harbour has 4 Oyster licenses** – verified as current on the NS Department of Fisheries website. The pamphlet I recently obtained at NS Fisheries and Aquaculture, “Harvesting Shellfish in Atlantic Canada” 2004, indicates that “Three federal government agencies work together to deliver the CSSP (Canadian Shellfish Sanitation Program) : Environment Canada, the Canadian Food Inspection Agency and Fisheries and Oceans Canada.” “An international reputation for quality and safety”. Also, the application does not include what Priority Substances (Canadian Environmental Protection Act, Priority Substances List Assessment Report No. 2, Effluents from Pulp Mills Using Bleaching 1991) are in the effluent when it exits the diffusers. **Backflow of effluent to the harbour** is possible because of the harbour’s Easterly exposure, including Nor’easter’s. High sustained winds with tides and surges flooding land of low elevation and saltwater marshes. The food chain that is impacted and can’t be mitigated because of the scope of the Caribou Harbour ecosystem, impacts food security. There are also climate change predictions for low lying land of at least 1.5 metres.

I was aware of **2 sunken ships in Caribou Harbour** so did a scan of some public records (**Eastern Chronicle, Pictou Advocate, Maritime Museum of the Atlantic, The News**) and

found not 2 but 22 reports of strandings and wrecks – a listing is attached. There were also 3 ferry crossing points from Caribou Island to “the mainland” years ago – one at the West end , one mid-island and one at the East end I don’t know if there is evidence of old wharf pilings at the East end of the island but there are at the other 2 locations. This information relates to **Section 10.2.8 Discovery of a Heritage Resource**. The **Special Places Protection Act , Historical Sites & Monuments Board of Canada and the Heritage Trust of Nova Scotia** also need to be considered for ensuring that the Marine Heritage of Caribou Harbour and area is not sacrificed.

The ferry service operates from May 1 - December 20 between Caribou Harbour and Wood Islands PEI. There is no mention of the impact of pipeline construction sedimentation to accelerating the next channel dredging timeline or whether the contents of effluent sediment will curtail or complicate the ferry channel dredging in the future. The ferry is the only direct connection between PEI and Nova Scotia. Both provinces emphasize the natural setting and recreational activities in tourism promotion. **The ferry interacting with the effluent plume isn’t addressed in the application; for example: colour, odour, froth and aerosolizing of the effluent** – potential negative impact to the iconic tourist experience that reaches beyond the ferry ride. Pictou Island is experiencing success as a recreational destination and that ferry also operates out of Caribou Harbour.

“Those who fail to learn from history are condemned to repeat it” – Winston Churchill, 1948. In 1994, an effluent pipeline proposal into the Strait was refused. What is different today? However, Jean Francois Guillot, Vice President Operations East with Paper Excellence Canada, owner of Northern Pulp stated in a *Northern Pulp Press Release, March 6, 2019*. “Northern Pulp’s new wastewater treatment facility **will ensure no untreated wastewater ever leaves the site** and will then continue our practice of releasing treated wastewater into the Northumberland Strait.” Honourable Minister, the promise is highly dependent on the criteria for the definition of treated and pointedly omits the same assurance for the pipeline and effluent which is in my understanding no way close to the quality of the Middle River which is supplied to Northern Pulp for processing – defining “treated” to align with the public’s understanding of treated isn’t clear and wouldn’t be further clarified until after operations are well underway. The comparison of the borrowed Middle River prior to diversion for processing, compared to the partially treated effluent at the outfall, then at the 360 degree? 100 metre mixing zone isn’t addressed in the application. I disagree with Northern Pulp’s standard for considering the effluent treated and ready for the pipeline. If onsite the processing allows for cooling of product and adjustment of process substances/chemicals, **why does the design of the Effluent Treatment Facility determine it as “pipeline ready” when the effluent is still at polluting levels when it leaves the ETF?** Who has the **Liability** for the effluent which escapes or is expelled offsite, on land and/or in the marine environment? This is not addressed in the application and isn’t that related to mitigation? Reversing the effect may not be possible so is a significant environmental effect. There is an old saying about closing the barn door after the horse is out. The implication is that “new” or “replaced” means improved. What I’ve understood is that the effluent will be the same and TSS will be increased, therefore **not an improvement**. I believe this is misleading to the public and may have affected understanding and responses about this application. The temperature and salinity are not managed onsite. Public engagement sessions about the Caribou site could have provided this distinction. The Nov. 2017 engagement panels

are not all applicable to the Caribou option. Because there was no public engagement session, I request that the Minister allow time for public comment on any new information following the Honourable Minister's decision. If thought could be given to the variety of literacy levels, that would make the information more accessible.

"One of the most environmentally responsible mills in Canada". Northern Pulp promotes its smaller footprint for partially treating its effluent onsite but doesn't acknowledge and to my understanding doesn't include the continuation of that footprint as the pipeline is laid adjacent to Pictou's watershed or the **pipeline's end destination in lobster grounds at risk for losing international certification for the Maritime lobster fishery**. The footprint comparison is a false assurance as is the comparison to other mills which can't be compared reliably to this unique setting.

Negative effects for emissions from burning the sludge are unclear. There must be a thorough analysis of what will be burned, the by-products, the precipitates and the potential health effects before adding to our air.

Caribou River Cottage Lodge, Pictou Lodge, Waterside Beach Provincial Park, Munroe's Island & Caribou Provincial Park, the Fisheries including the Caribou Harbour Oyster Licenses, Gull Spit narrowing the harbour entrance, the 22 ship groundings/ wrecks, the sedimentation conditions that already exist, the Pictou Watershed, no improvement to the effluent, location of the outfall in an ecologically sensitive area, the fluctuating ice conditions with no indication of protection of the diffusers from ice scour, the lack of an early warning detection plan for leaks or pipeline/diffuser loss of integrity, the migratory bird flyway, the numerous sensitive salt water marshes, dune grasses, edible beach plants, the flushing challenges of the harbour, the low lying farmland that is flooded by tides and surges, negative impact to cottage rentals and property values / transactions / leases just as the province has simplified short term rentals, the ferries that are being improved to "green" standards churning through the effluent plume, the present and future uses that are in direct opposition to the polluting presence of the effluent outfall. Algae impact to Caribou Harbour is an example of how the balance may be tipped before any testing occurs. In appendix J1-1 the prediction for algae effect in Caribou Harbour won't occur until "after" the pipeline is commissioned. There is no indication in the application as to how this could be mitigated after the fact. Would the pipeline be closed or continue to be permitted to pollute if testing post commissioning determined issues not in keeping with the predictive modelling? Local knowledge is relevant to this application. There is insufficient time for this project to meet the legislated obligations to PLFN for January 31, 2020.

I do not support the acceptance of this application. This is not a grandfathering of an operation. Relocation of the effluent outfall adds new layers of complexity and risk.

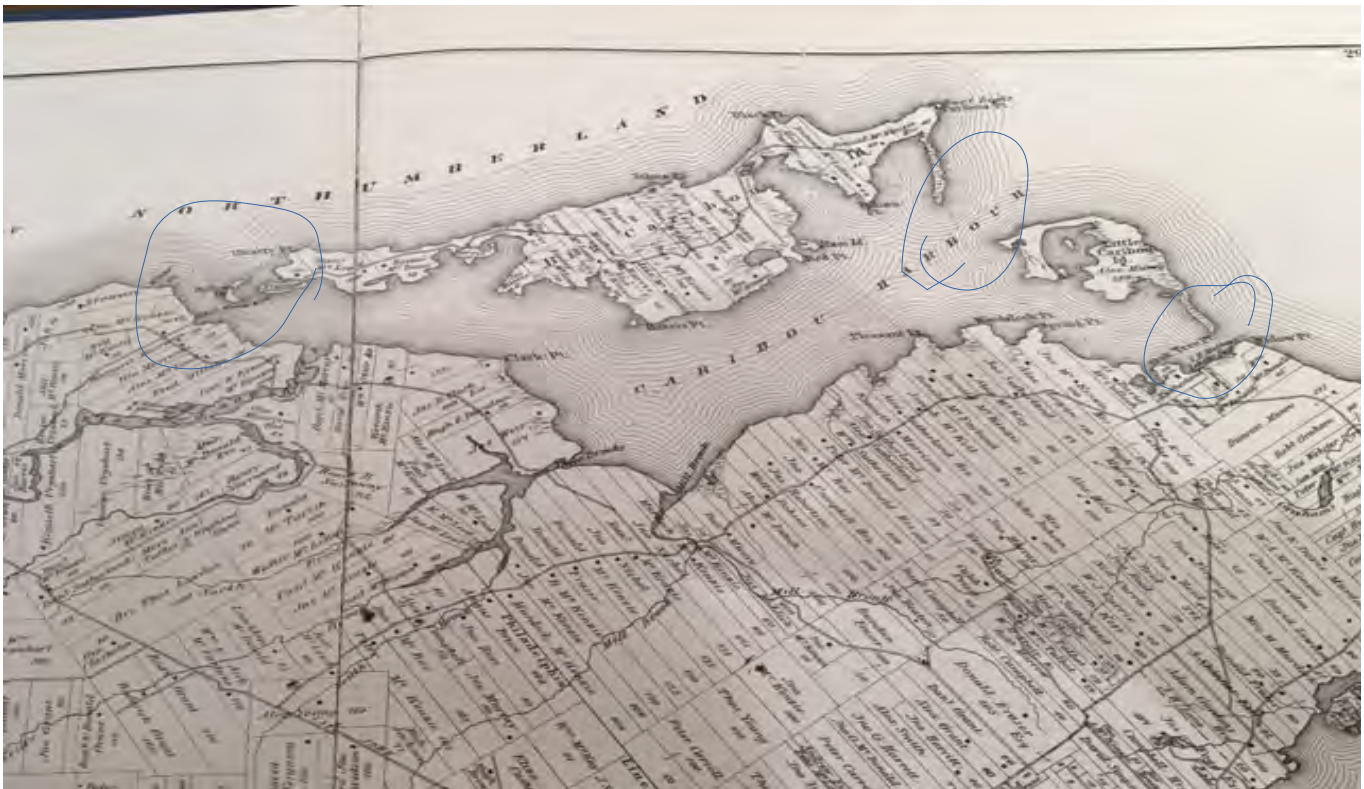
Respectfully submitted,

March 8, 2019

Caribou Harbour Ship Groundings and Wrecks

Caribou Island at Hector Centre , Pictou, NS 2019-02-28 The local papers are a source of marine incidents. To be noted, the list of **22 incidents** is not exhaustive.

Map of Caribou Harbour from Illustrated Historical Atlas of Pictou County Nova Scotia, J.H. Meacham & Co., 1879 shows 3 entrances to Caribou Harbour. 1 at the west end referred to as Ford at Low Tide (a sandbar). Little Caribou entrance referenced with the HILDA was at the southeast of today's (2019) Munroe's Island. Both of those have since silted in and the one remaining entrance - "Big Entrance" - is regularly dredged for the ferries to PEI.



KEY:

E.C. Eastern Chronicle; P.A. Pictou Advocate; M.M.A. Maritime Museum of the Atlantic On the Rocks (novascotia.ca/museum/wrecks/wrecks/year.asp)

E.C. Jne 25, 1846 pg. 3

Brigatine **JUSTINE**, Capt. Smart of and from St. John's, Nfld., bound for Pictou, went ashore June 19th at the big entrance of Carriboo Harbour

E.C. Dec.3, 1846 pg.3

Schooner **CATHERINE**, Webster, master, ashore at Carriboo Harbour – part of cargo taken without damage, taken to Ch'town to be sold by Lloyd's agent

E.C. Nov.28,1850 pg. 3

Schooner **SPREE**, of Ch'town, Capt. Griffiths. Was wrecked Nov. 21st at Carriboo Island

E.C. Nov. 29, 1855 pg.3

Schooner **HELEN**, Matatall, master of Tatamagouche was wrecked on Carriboo Island on the 24th inst.; crew saved

M.M.A. **HARRIETT** 1868-10-17 stranded Caribou Island

Schooner, leak, loss, ran ashore

Voyage from Pannel Bay. Registered at Arichat, NS

M.M.A. **SHANNON** 1868-10-17 stranded Caribou Island

Brigatine loss cause of event – unknown “No room to wear”

Voyage from Georgetown to Charlottetown

M.M.A. **EMMA** 1870-06-09 stranded Caribou Point

Brigatine loss judgement error total loss

Voyage from France to Quebec

M.M.A. **BELLE** capsized and sank July 1, 1875 Capt. William Biggar. (?July 8, 1875)

M.M.A. **OCEAN** 1875-09-04 (01?) stranded Caribou Island tonnage 353

Barque loss fog

Voyage from Cardiff, South Glamorgan, Wales to Quebec, Quebec, Canada

Registered at Memel, Klaipedos, Lithuania

M.M.A. **MARY HART** 1875-10-24 stranded Caribou Island Shoal, Pictou Harbour

(note: I think this is an entry error and would more likely be Caribou Harbour, not Pictou Harbour) tonnage 26

Schooner loss stress of weather Total loss Cargo accounted for \$200 of loss

Voyage from Cheticamp, NS Registered at Arichat, NS

M.M.A. **ELLEN** 1875-11-20 stranded Caribou Harbour, entrance tonnage 49

Schooner loss Navigation Error Mistook Light Partial loss

Voyage from Charlottetown, PEI to Pictou, NS Registered St. John's Nfld.

M.M.A. **NANCY** 1879-10-19 stranded Caribou Island tonnage 63

Schooner loss stress of weather capsized and stranded Total Loss Cargo accounted for \$250 of loss

Lives Lost 5

Voyage from Richibucto, NB to Pictou, NS Registered Shelburne NS

M.M.A. **MAGGIE** 1883-11-17 stranded Caribou, off tonnage 85

Schooner loss stress of weather snowstorm partial loss

Voyage from Bermuda to Charlottetown PEI Registered at Hamilton, Bermuda

M.M.A. **EMMELLE** 1885-04-11 wrecked Caribou Island tonnage 100

M.M.A. **HILDA** 1886-05-09 stranded Little Caribou Entrance tonnage 719

Barque loss stress of weather total loss

Voyage from Liverpool Merseyside, England to Pictou, NS Registered at Pictou, NS
M.M.A. **CAPE BRETON** 1887-11-07 Foundered Caribou Island tonnage 100
Dredge loss stress of weather partial loss
Voyage from Wallace, NS to Pictou, NS
M.M.A. **BOUNTY** 1887-12-20 stranded Caribou Island tonnage 55
Schooner loss stress of weather partial loss Cargo accounted for \$300 of loss
Voyage from Charlottetown, PEI to Pictou, NS
M.M.A. **UNION** 1910-07-20 stranded Caribou Island tonnage 77
P.A. **CHARLES A. DUNNING** 11 Oct. 1951 P. 1
Ferry grounded on Gull Rock, Caribou Island
P.A. **SAULT AU COCHON** Nov. 12, 2010 Barge grounded on reef off Munroe's
Island / Caribou Provincial Park High winds and 4 metre seas

The News July 16, 2015, Excerpted from Past Times, John Ashton.

"... Pictou County has had accounts reported of buried treasure within its seacoast and landmass. Some are very well known, such as the buried gold of Caribou Island. The story has been passed down for generations and attempts have been made over the years to retrieve the riches. Supposedly, in 1755 a French frigate buried a large cache of gold destined to pay the soldiers at Quebec. They built a "well of stone" and deposited the bullion deep within its rock walls. Over the years attempts have been made to recover the fortune, but have proved unsuccessful. Ghostly sightings at night have been reported of French sailors walking about the beach near Gullrock Lighthouse protecting their stash."

"Another well-known buried treasure story was reported in Rev. George Patterson's A History of the County of Pictou, 1877. A French war ship containing salvaged treasures had escaped the British attack on Louisburg, Cape Breton, in 1758. The French vessel was chased into Caribou Harbour and eventually beached at a little inlet off the Little Caribou River. Instructions were left with the Mi'kmaq First Nation people that if discovered by the English, the craft was to be burned. The father and uncle of Pictou Deputy Sherriff Thomas Harris found the abandoned French ship. When they returned with implements to move her, she had been torched. Forty-four years later a vessel was reported travelling up the Caribou River at night and in the morning the people of the area discovered a shallow hole dug at the head of tide where all clues point to a buried treasure dig. This author visited this site in 2007 and could see the actual areas that had been dug and examined by treasure seekers..."

"John Ashton is the Nova Scotia Representative for the Historical Sites & Monuments Board of Canada and the Regional Representative for the Heritage Trust of Nova Scotia. "

From:
To: [Environment Assessment Web Account](#)
Subject: Addendum to my submission to proposal for NP replacement ETF
Date: March 9, 2019 10:31:30 PM

I request the following references I had misplaced be added to my submission - context for some of my comments.

Table 4.2-4 Pg 67-68 " Preliminary modelling indicated that Pictou Harbour has limited mixing with the Northumberland Strait - water in Pictou Harbour tends to stay within the harbour. Though treated, effluent would therefore result in the accumulation and increasing concentration of residual contaminants contained in the treated effluent over time. Given the discharge rate, effluent contamination accumulation could result in result in negative effects on the harbour over time." The application does not support why Caribou Harbour was clearly deemed better than the Pictou Harbour site even in **Table 6.7-1**. Nor did it illustrate an overlay of nautical maps of both sites to clearly show Caribou Harbour as inferior to the already rejected site. The statement does confirm that when Northern Pulp uses the term "treated effluent" or "treated wastewater" throughout its application and in public engagement , that **when treated, the effluent will accumulate and concentrate residual contaminants over time**. The distance between the 2 points is less than 6 km. An average walker can do that distance in an hour and a half. If compared by modelling for an average current, the time from effluent outfall would be less than that.

Appendix I-1 "all treatment will occur on site" - this contradicts the admission that the effluent will accumulate and concentrate residual contaminants over time. Dilution postpones, not treats and is retrogressive. Together with today's (March 9/2019) report in the Halifax Examiner that a Dalhousie researcher is claiming misrepresentation of her air emissions report in the application, the application has gaps.

Appendix I-1 Panel 6 Footprint "Can the process fit on the mill property, without impacting adjacent natural features and property owners?" There is an omission that the part that doesn't fit on the property, namely the pipeline and the effluent coming from it, would have impacts on adjacent natural features and property owners. The term footprint is not sufficiently defined and skews the understanding of the degree of benefit being claimed by Northern Pulp.

2.4 "...potential environmental effects of the project have been considered for all phases of the project including those potentially arising from credible accidents, malfunctions, and unplanned events." Ship groundings and wrecks are part of the history of the CHB option but no mention in the assessment and no indication of updated , effective monitoring , for the effluent parameters and integrity of the pipeline and diffusers.

2.5.2 Env. Protection Measures " Siting of the marine outfall to minimize the potential impact to marine water quality." Contradictory to I-1 that all treatment will occur on site.

Please note in Appendix E1, Figures 2.11 and 2.12 must be zoomed to more accurately see the simulated effluent in CHB. There is no scale and it isn't entered on a nautical chart. The other figures in that section are likely the same. Without that, the key is of limited benefit unless the reviewer knows to zoom in. Very limited, and misleading to a reviewer not familiar with CHB. It would be more transparent and credible to cue the reader to zoom to view and to indicate the altitude.

Appendix E3 2.2 Far-Field Modelling Results "Modelling provides relatively higher dilution and less potential effluent impact on Caribou Harbour water. ...transported predominantly with the off-shore currents in northwest and southeast directions. The effluent intrusion into Caribou Harbour is predicted to be minimum" The words in this statement are indefinite and more of a wait and see. Given what is at stake environmentally, this too low a standard to go forward with this application.

4.2.5.3 Marine Civil Engineering Geotechnical Considerations "Caribou Island has not had this study".

5.3.1.10 Appendix F Pipe Installation "Removal and disposal of dredged material is not anticipated." The 4.1 km long, 3 metre wide trench for the 1 metre pipe will displace seabed material. The 2008 ferry dredging under Transport Canada's jurisdiction was barged and disposed on land. What information was not included in the application to explain why there would not be removal and disposal?

Land to Marine (Near Shore) Connections "The near shore portion of the pipeline will require planning and management of worksite construction and logistics affected by water depth, fluctuating tidal levels, and ice scour." The application does not indicate why this would be acceptable at CHB but not at Pictou Harbour less than 6 km. away - a conflicting unsupported statement.

5.6.2 Air Contaminant Emissions "Potential for odour to be perceived." This is not sufficiently described.

5.7.2.7 Marine Environment 5th bullet refers to protecting the pipeline from ice scour but doesn't address diffuser protection. This would be an oversight and an error with negative consequences.

6.5 "Engineering considerations for Caribou Harbour" These are not clearly laid out to show the distinction from Pictou Harbour which is more detailed. This is a significant gap for reviewers and can't support CHB as a viable option, just as for the rejected Pictou Harbour option.

Table 6.6-1 Typo? I believe the year would be 2019, not 2018 (Native Council of Nova Scotia shows January 10, 2018)

Table 6.7-1 Effluent quality "Point C results and the discharge from the proposed facility will be similar." The proposed ETF will not be improving the effluent state.

"Fresh water from Middle River makes its way to the Northumberland Strait whether NPNS uses the water or not, therefore the same volume and fresh water mixing occurs naturally." This is a **false** statement. What is "natural" (from my understanding of the term) is the Middle River entering Loch Broom, then Pictou Harbour, then the Strait - fresh water and saltwater mixing occurring along the way by tides and currents and temperature and salinity ambient. The Northern Pulp manmade intervention is **not natural**. In the application, the Middle River is diverted at Loch Broom, to use in mill processes including the proposed ETF, then pumped from the mill site for 15.5 km via pipeline with the last 4.1 km on the seabed before being discharged at velocity from 3 diffusers set 25 meters apart and 100 more metres before predicted to be at ambient temperature and salinity.

7.0 Integration of Study Components "Under the nearshore effluent dispersion scenario, the potential effects zone based on the sublethal toxicity testing is within 323 metres of the discharge at Boat Harbour. Under the offshore effluent dilution scenario, the potential effects zone extends to greater lengths (to ~ 7.3 km)". The accumulation would still occur but in an extended zone. The modelling uses the 85% figure for predominant southeast and north west flow. There is no comment on the modelling of the other 15% which I believe would include winds and currents that come up the harbour from any easterly direction. There would also be currents intersecting from the west across the north shore of Caribou Island. There is no mention of this as part of the modelling.

Many residents who live elsewhere far and wide for the winter have been away during this process. Although I registered face to face in Nov 2017 at the New Glasgow engagement session, by email and online, I didn't receive the update notifications volunteered by Northern Pulp - not one. **Appendix I1 Panel 17** "We are particularly looking for your input on the recommended route and outfall area (Nov. 2017). I did give input to the Pictou option and again with the Caribou option but didn't receive a response except for one where NP defended

its history of effluent into the strait as a given for the future.

I believe there must be a solution to safe, non-polluting effluent management that doesn't infringe on others. Caribou Harbour and the Northumberland Strait isn't an acceptable choice.

As a stakeholder, I don't give permission for effluent or residue on my property.

Thank you for adding my reference points to my submission.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 11:07:52 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
@bellaliant.net)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Pipe Proposal
Date: March 8, 2019 11:08:45 AM

Dear Minister McKenna,

I am writing to you regarding Northern Pulps Replacement Effluent Treatment Facility Project.

My name is . I have lived in Nova Scotia for my entire life. I come from an extensive line of fishermen that have fished the waters of the Northumberland Strait for years and years. I have grown up in the fishery, and am currently employed by my father, whom I help run a commercial license. The fishery is important for my family, as my brother has recently purchased a commercial license of his own and we are all employed in the Fishery. This setup is very common in this area, and many people depend on the Strait to make a living and it is key to our way of life. The potential impact of this project has the possibility to absolutely ruin my way of life and cripple my family and friends. Its these reasons that I am so invested and concerned about this project.

I wish to raise three points of concern with the project.

First, as a fisherman I am concerned, that the proposed effluent pipe will be a detriment to the local fisheries, including that of lobster, rock crab and herring. The proposed outfall location is premium breeding grounds for all of these fisheries, and are of grave importance to the local area, as well as the entire economy of Nova Scotia. I feel as though there should be a greater deal of importance placed on protecting these fisheries. The science provided in Northern Pulps proposal is outdated, being conducted in the 1960's. Our industry is under constant pressure to evolve and become more sustainable and improve our fishing methods as well as our conservancy methods. How can a large corporation, who is not even Canadian owned, come in and attempt to infiltrate our waters, and not be subject to more severe outside pressures to ensure that what they are doing is not only scientifically acceptable but also morally right. Just because they claim that the effluent technically passes whatever loose requirements imposed by the federal pulp and paper mill guidelines, does not mean that is morally right to be pumping anything into the ocean. All levels of government have been claiming that we need to protect the ocean, that we need to cut down on pollution and begin to care for our environment because we won't have it forever. How can someone say this but then consider pumping effluent full of toxins into the ocean. The Government can't have it both ways and are going to have to step up to the plate. Is big industry more important than the health and well being on not only the Environment and ecosystem of the Northumberland Strait, but as well as the health and well being of the people that live there. Nova Scotia is considered Canada's ocean playground, and that's for good reason, the province is surround by the ocean. But what happens if Northern Pulp wants to start pumping their effluent into that playground? No ones going to want to play there anymore.

A separate point I would like to bring up is the monitoring of the pipe and its wellbeing. My main point being that how will the pipe be monitored? They claim that the accidental

release of effluent can occur. There is an example of this in the fall of 2018 when a ruptured pipe was discovered by a passerby in the Pictou Landing First Nations area. How can Northern Pulp claim to monitor their systems when a pipe rupture was undetected on land, let alone if the pipe was buried in the sea floor. I feel as though this risk needs to be better assessed because the potential for effluent to leak throughout the pipeline is very high. This applies for both the sections, land and ocean. This can pose problems for the fisheries and the marine ecosystem in the marine environment, but just as big a problem on land as the pipe is running right through the town of Pictou's water shed. I am sure the residents of Pictou do not want any effluent in their drinking water. Risking these aspects seem to be a very great risk that Northern Pulp is willing to take. I feel as though if the effluent leaking and entering the environment is seen as a problem, why is the idea of pumping it into the Northumberland Strait seen as an acceptable means of disposing of effluent in the first place?

Finally, this entire process, with the timelines put forth in the entire process, is once big farce. Northern pulp has had 5 years, to put together this large report on the entire project. That's fine. Where I draw the problem is that we as a concerned public, have only a fraction of that time, to formulate any concerns and put them forth to the government. In fact, the time line for concerns is only 30 days. This to me is a gross miscalculation. It is a hardly fair that the public has so little time to critique and raise concerns on a project that could potentially have a lasting and detrimental impact on the entire Northumberland Strait region, including that in neighboring provinces of New Brunswick and Prince Edward Island. This raises an aside to my main point. That being that why is the Government of Nova Scotia the one to make the decision when the Northumberland Strait is a body of water the impacts three separate provinces. As a fisherman, everything I do is monitored and controlled by the federally department of fisheries and oceans. They control everything in the fishery, as a federal body. So why does this decision that has the potential to impact everything mentioned above, being made by a provincial government? This does not seem right. Especially when you take into consideration that the Government of Nova Scotia has funded the planning and design of this project, and as well has helped the Pulp Mill with monetary funding and aiding them over the years with extended boat harbor leases or example, so that they can continue their environmental racism uninterrupted. All this seems to lead to the conclusion the that Government of Nova Scotia is unable to make this decision with a clear and concise conscience and therefore should defer and have the choice put into the hands of the Federal Government so that a more thorough investigation and assessment can take place so that everything is out in the open and there will be no more secrets and fear in the community. Because right now there is fear and division. And all this could be fixed by the Government if they aid on the side of caution, and don't give into the Mill once again. Don't let them have their way anymore. This project should be a Federal issue. No more romance between Northern Pulp and the Provincial Government.

Restating the three reasons that I oppose this project,

- 1) Lack of sufficient research regarding the Fisheries
- 2) Lack of monitoring and potential disastrous leaks
- 3) An underhanded process that only helps Northern Pulp and the overlooking of the Nova Scotian Government that this is a Federal issue

These points are a handful of reasons that I believe this project should be handed over to the Federal Environment Minister. This entire project should be subject to extreme scrutiny and not be taken lightly. A decision that impacts three separate provinces and millions of people should have to be approved by simply a few days' worth of thinking and processing. I plead that the Federal Government be involved, and that the Northumberland Strait be taken care of and not be put at risk.

Thank you

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 11:16:18 AM

Project: replacement_effluent_treatment_facility_project Comments: Partially treated effluent is not acceptable for the otherwise pristine waters of the Northumberland Strait. The present effluent from Boat Harbour is already beyond acceptable, and I understand that the suspended solids in the proposed effluent will be even higher than the present Boat Harbour situation. â?¢Pumping partially treated effluent into the Northumberland Strait has the potential of contaminating its waters and destroying the lucrative fishery and important recreation industries of the area. It is important to strongly reject this Project as the people of NS are still dealing with the destruction at Boat Harbour and certainly do not need the threat of a similar occurrence in the Northumberland Strait!!

Name: @ns.sympatico.ca Address:

Email:

Privacy-

Statement: agree x: 51 y: 17

From: @outlook.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 11:19:28 AM

Project: replacement_effluent_treatment_facility_project Comments: I am writing to express my strong support for Northern Pulp Nova Scotia in its efforts to build a new effluent plant. I believe they must be given an adequate extension beyond the time-line in the Boat Harbour Act to allow them to complete this task without a shutdown. Northern Pulp provides the largest market for by-products of our lumber mills providing small wood-lot owners who remove low quality wood through intensive forestry management and commercial thinning a market at a fair price for this product. Northern Pulp in not only a driver of our forestry industry and our rural economy, it is a driver for all of Nova Scotia. As the largest single customer of the Port of Halifax with roughly 40 of the port business. Without the volume of forestry related freight going out there will be a lot less incentive for ships to come in so it is easy to see that the economic spin-off from this operation is as important to our urban economy as it is to the 100's of rural communities that depend on the forestry industry. Without this pulp mill, our forestry contractors and truckers will be greatly impacted, and woodlot owners will have no economic incentive or financial resources to manage their land properly. Forest land will be devalued, and jobs in these, and other industries will be lost. This industry generates tax dollars that are much needed to support health care, education and infrastructure for those who live and want to live here. There needs to be a new more efficient effluent plant and that the current practice of dumping waste in Boat Harbour must stop. However, Northern Pulp inherited this situation less than 10 years ago when they purchased the mill, with the commitment that the Nova Scotia government owned effluent plant would be in place until 2030. Since their purchase, they have vastly reduced emissions from the mill largely at their own expense and are attempting to build a state-of-the-art treatment facility that will replace Boat Harbour with an unreasonable, arbitrary deadline while being fought every step of the way by various interest groups. As a parent of young professionals who want to live and work in Nova Scotia, I am very concerned that this type of action will make it impossible for them to raise their families here. After 30 years of effluent going into Boat Harbour, the incremental harm to the environment by an extension which would allow Northern Pulp the required time for the environmental review, permitting and construction does not justify forcing this mill close. Northern Pulp needs to be given the time needed to navigate the process and to finally build and commission this state-of-the-art effluent plant and be one of the long-term economic drivers our economy needs and be able to continue to generate the wealth we, as Nova Scotians, desire and deserve. I strongly support the proposed effluent plant be approved, and an extension of the Boat Harbour Act deadline be given to allow Northern Pulp the time to complete the task. Name: Email:

@outlook.com Address:

: Privacy-Statement:

agree x: 63 y: 14

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp
Date: March 8, 2019 11:20:04 AM

Northern Pulp is absolutely horrible in multiple ways. It has to close. I want my kids to grow up in a healthy environment as they should. This environmental disaster has operated because of narrow minded politicians. Shut it down.

Sent from my iPhone

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 11:45:04 AM

Project: replacement_effluent_treatment_facility_project Comments: I have studied the executive summary for this project and the science certainly supports this project and the continued operation of the Northern pulp mill. To that end an limited extension to the Boat Harbour facility operation is warranted. In granting that, the PLFN people MUST be considered with guarantees and compensation for their contribution to the long term economic viability of Pictou County and Nova Scotia as a whole. Name: Email:

@gmail.com Address:

: Privacy-Statement: agree

x: 53 y: 15

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 11:54:07 AM

Project: replacement_effluent_treatment_facility_project Comments: I hope that Minister Miller, and DOE staff, have read the compelling commentaries on the Northern Pulp proposal by Linda Panozzo and Joan Baxter that have appeared on March 7 and 8 in the Halifax Examiner. It is excellent investigative reporting and certainly deserves careful consideration. I find it convincing. Name: Email: @eastlink.ca Address:

Privacy-Statement: agree x: 45 y: 20

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 12:31:48 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@seasidehighspeed.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Northumberland Strait = Abercrombie Point
Date: March 8, 2019 1:19:17 PM

Installing a treatment facility on mercury-contaminated land at Abercrombie Point with an effluent pipe to release treated effluent directly into fishing grounds in the Northumberland Strait would be environmentally damaging; this action would adversely affect marine life and the waters it inhabits and on which it depends. Please reconsider and reject this proposal. Thank you.

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 1:43:44 PM

Project: replacement_effluent_treatment_facility_project Comments: Voters and other residents who care about Nova Scotias economic and ecological future stand opposed to Northern Pulps Effluent Treatment plan. I want to be counted among those who affirm that the evidence points to the fact that the days of allowing massive pollution of our province " and others " by business interests must now come to an end. For best results, a moratorium on such practices is decades overdue, but it is better to stop now than never. Please disallow this plan, and insist that the Boat Harbour treatment area close on schedule. Clean and sustainable business is the future of Nova Scotia, and our region. There is no longer room for businesses who pollute our air and water we need them to sustain the life of this and future generations. Thank you for listening! Name: Email: @gmail.com

Privacy-Statement: agree x: 57 y: 26

From: @bellaliant.net
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 2:03:09 PM

Project: replacement_effluent_treatment_facility_project Comments: The multiple thousands of people in Nova Scotia, P.E.I. and New Brunswick depending for their livelihoods on a healthy marine environment in the Northumberland Strait cant be ignored and put at risk. An independent Federal environmental assesement needs to be done! Name:

Email: @bellaliant.net Address:

Privacy-

Statement: agree x: 61 y: 30

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 2:12:15 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
@bellaliant.net)

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 2:14:32 PM

Project: replacement_effluent_treatment_facility_project Comments: It seems clear to me that the Northern Pulp Replacement Effluent Treatment Facility Project lacks significant data, fails to address the concerns expressed by the community and blatantly ignores the set timeline for the project. The government must reject Northern Pulp's proposal and close the effluent treatment facility on schedule. Northern Pulp's submission does not prove a lack of significant risk, and is missing critical data. In the proposal Northern Pulp admits that they do not know what will be coming out of the pipe. How can they claim there is no significant risk to the environment, to the fisheries and ecosystem of the Northumberland Strait and the people of Pictou County when they do not know the chemical composition of the effluent? When questioned by CBC television on their recent visit to Boat Harbour the representative from Northern Pulp acknowledged that the effluent will be no better than what is being released into Boat Harbour now. Boat Harbour is a disaster and currently subject to provincial Class 2 and a federal environmental assessment because of the dangerous mix of chemicals and the difficulty involved with removal and remediation. Their proposal to pump that mix of toxins directly into the Strait is simply unacceptable. As recently reported in the news, despite internal recommendations by Northern Pulp contracted consulting firm and marine biologist for a study on the potential impact of effluent on lobster larvae, no testing was done. This is a basic failure by the company to do their due diligence. The response from the company's spokesperson, that they would start testing once the new system was in place, is insufficient and insulting to all concerned. We cannot use the Northumberland Strait as a testing grounds for their pulp waste. The proposal to burn the dewatered sludge in the power boiler is also of significant concern. Issues with the power boiler, first noted to be problematic in 2006, have never been addressed. Particulate matter emissions have been exceeded from that aging stack on numerous occasions. Not knowing what chemicals will be in the sludge, coupled with a glaring lack of properly functioning pollution-abatement equipment in the stack that will be burning it, could spell much worse air quality for local residents. There is little mention of the mercury contamination on the former Canso Chemicals site directly adjacent to the proposed location of the new treatment facility. Disrupting this contamination on a site surrounded by water requires extreme caution and a full examination, but there is little mention of this in the proposal. There is insufficient evidence to know exactly how broad any damage might be. The company's claim that damage will be minimal is not credible and should not be accepted. Fisheries, tourism and outdoor recreation are important economic factors and should not be put at risk. Scientists warn that the Gulf of St. Lawrence is warming more rapidly than almost anywhere on Earth. Adding additional stressors to a system that is already stressed is not wise. The Northumberland Strait is an area that requires additional protection, not additional degradation. The company's request for an extension on the Boat Harbour act should also be rejected. The timelines were clear from the day the legislation was introduced. The mill is owned by a multi-national company that owns pulp mills around the world. They should have had no problem calling on the expertise available to them to complete this project on time. I know jobs will be an issue in this decision. I would simply say that the government should look at the amount of money provided to the mill over the years and commit to providing a similar amount to future business development in Pictou County. The mill claims that Pictou County will be lost without them, but I see a beautiful, historic town of Pictou that cannot attract citizens, businesses or tourists because of the cloud of toxic air from the mill. This project is simply not worth the risk. The precautionary principle means it is incumbent on

the Nova Scotia government to err on the side of caution. Reject the proposed Northern Pulp Replacement Effluent Treatment Facility Project. If you don't feel you can do this with the evidence before you, please call for a full Environmental Assessment report on this proposal.

Name: Email: @gmail.com Address:

:

Privacy-Statement: agree x: 51 y: 20

From: @mlb.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 2:22:56 PM

Project: replacement_effluent_treatment_facility_project Comments: The current Northern Pulp facility has operated under various ownership for over fifty years and since that initial startup, has progressively made improvements to lessen environmental impact. The EA submission by NPNS for construction and implementation of a new effluent treatment facility outlines a system far superior to that of which has ever been utilized at the Abercrombie site since 1967 and would be at the pinnacle for this type of technology when compared to any facility of this type on a global scale. There is no doubt that the current Boat Harbor site must be reclaimed after 50 years of operation as an effluent treatment facility, however, there must also be an allowance for an EA to be completed and consideration given to NPNS to complete the necessary work in a reasonable timeframe in order to install a state of the art treatment facility. In addition to the environmental considerations which must be assessed, the economic impacts must also be considered. With the legislated deadline for closure of the Boat Harbor site less than one year away, it is undeniable that an effluent treatment facility project of this caliber cannot be completed within the timeline for closure as outlined in the Boat Harbor Act. Without an approved EA and extension to utilize the Boat Harbor treatment facility site, it would most certainly be catastrophic to the operations of the NPNS facility. The potential closure of Northern Pulp would affect the very foundations of the forestry/sawmilling sector in the Province of Nova Scotia, causing widespread mill and forestry operation closures, massive layoffs and a trickle effect of spinoff businesses feeling the negative impact of these closures. The overall economic outcome resulting from a closure of the NPNS facility would have a devastating effect on the overall economic status of the Province of Nova Scotia. Whether we want to believe it or deny it, forestry, in all of its facets is a major sector in the Province of Nova Scotia and for well over a century has been the backbone of many rural communities and one of the principal drivers in the provincial GDP. The future of the forestry sector and the economy in the Province of Nova Scotia hinges on responsible decisions in the upcoming months. Name: Email: @mlb.ca

Privacy-Statement: agree x: 63 y: 20

From:
To: [Environment Assessment Web Account](#)
Subject: Proposed project for affluent disposal from Northern Pulp
Date: March 8, 2019 3:10:32 PM

A Federal Assessment is needed.

There is a conflict of interest in having the Nova Scotia Government approve, regulate and manage the treatment facility. I own wood lots in Pictou County.

I live at Waterside on the shore of Northumberland Strait. Our family, all three generations of us, swim in this water from the first of July till the first of October. My cousins and neighbours fish lobsters, herring, scallops and tuna from Toney River and Caribou in this water. This is the richest fishing grounds in the Strait.

Clear cut forestry practices are not sustainable. Northern Pulp can not depend on continuous supply of a diminishing resource. It is not sustainable or desirable. Forestry practices have to be implemented that will enhance a more natural forest flora and fauna with a more diverse species mix. Saw mills will continue to have lumber sales and the mill in Port Hawkesberry and others want to purchase chips. Larger logs make more lumber and have more value. The Layhee report makes recommendations on the future of forestry practices.

Tourism and the sales of seafood depend on a clean and un contaminated environment.

Health needs to be our top priority for ourselves, our children and grandchildren. There are unknown substances in the water effluent and the air pollution. A Federal Assessment is needed.

[gmail.com](#)

From:
To: [Environment Assessment Web Account](#)
Subject: Request for Federal Assessment
Date: March 8, 2019 3:25:59 PM
Attachments: [Request for Fed. Assess..pdf](#)

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March 8, 2019

The Hon. Margaret Miller
Minister of Environment

Dear Minister Miller:

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project.

My name _____ and I grew up and live on the Sunrise Trail along the Northumberland Strait. I have lived there for 61 years and have been fishing for 36 years on the beautiful Northumberland Strait.

When the bridge was built from Nova Scotia to P.E.I. in 1997 it had affected the fishing industry where it took years for the lobster to start coming back to that area. It has just been the last few years that the fishermen in that area have seen an increase in lobster catches. During the building of that bridge the fishermen along the Northumberland Strait had seen a huge built up of silt in the traps that caused some concern. It took a few years for that to settle down so if you can try to imagine putting a pipe into the Strait with thousands of liters of effluent spewing into it, is just an environmental disaster.

Every year there are more and more regulations put in place to protect the fisheries carried out on the Strait. The Department of Fisheries is changing mesh sizes, escape mechanics and the number of lobster traps have been reduced from 300 to 280 to protect the lobster fishery. DFO has created a zone in lobster area 26A which includes Eastern PEI and a large portion of Nova Scotia where fishermen are only allowed to fish 1 m from land. The fishermen know how important it is to protect fish habitat and juvenile lobsters. The Federal Government calls this area a marine refuge. The fishermen are not allowed to drag scallops in this closed zone but Northern Pulp would be allowed to dredge, lay a rock mattress, lay a pipe, backfill, and have diffusers releasing a substance into an area the fishermen have been protecting for 30 years. An identical proposal for a pipe into the Northumberland Strait has been rejected twice before by the Federal Government for environmental reasons. The Fisheries is regulated by the Federal Government, fishermen are licensed by the Federal Dept. of Fisheries and fish in Federal waters so how can a foreign company place an effluent pipe in the these waters and only have to pass a Provincial Assessment.

Boat Harbour is being shut down in January, 2020 and Northern Pulp is looking for an extension. They had 5 years to plan what to do with their waste (solid and effluent) so what did they come up with? Let's pump it into the Northumberland Strait right through the marine ecosystem and it is also important to note Northern Pulp has no Plan B. Just the idea of running a pipe out into the Northumberland Strait that is Federal waters is an environmental disaster so it should trigger a Federal Environmental Assessment.

Northern Pulp has said it does not know what is in the effluent except they cannot run it through their boilers and pipes because it will corrode them. This makes a person question what it will do to the ecosystems in the Northumberland Strait. The consultants were asked what solids are coming out of the pipe and they could not answer the question so this is not an acceptable answer. Northern Pulp expects the PLFN, fishermen and

residents to not question the effluent that is being piped into the middle of a marine ecosystem. We do not know what is in the effluent and the amount of warm water that is being piped into salt water where the lobsters lay their eggs is the most absurd idea that I have ever heard. It is hard to imagine that thousands of liters of water is going to be pumped into the Northumberland Strait daily and we are expected to believe this will have no adverse effects on the marine environment. It is very insulting that a foreign company does not have to justify and provide facts that it will not harm the environment. Northern Pulp says it is **highly unlikely** it will be hurt the marine environment. Pulp & Paper regulations are geared for fresh water discharges and will sacrifice a river before it is discharged into the ocean.

The herring spawning beds are only ½ m from the outfall of the proposed pipe and there is also a rock crab nursery in the Strait that is the main food supplier for the lobster. Northern Pulp intends to excavate a trench through this ecosystem which will threaten the lobster industry. Northern Pulp has never assessed the impact on lobsters before the pipe goes into the Strait so if the pipe goes in there will never be any assessment.

The Northumberland Strait has a very shallow channel so there is a concern the water is just not deep enough for a pipe. The Nova Scotia/PEI ferry travels this route so what effect will this pipe and effluent have on this service provided to residents and tourists during the summer months. There are numerous tourists that come to Nova Scotia for our delicious lobster and to experience it firsthand. We have experienced divers that are continually getting calls from fishermen who have problems with their propellers. These divers know the waters in the Northumberland Strait from their firsthand experience over the years. They know the tides and where the water is shallow as well as the problems this creates. Both Caribou and Toney River have to be dredged because of the ice scours changing the course of the sea bottom. The weather plays a big factor in the shifting of the Strait's sea bottom that continually fills in at both wharfs most fishing seasons. Dredging occurs in the spring before the lobster season begins and there are truckloads of this material removed around each wharf.

It wasn't too many years ago that the beef industry suffered drastically because of the mad cow disease. All it took was 1 cow and the entire beef industry suffered so all it will take is 1 lobster to effect the entire country. So why are we putting the fishery at risk for a project that was already denied twice and they cannot provide facts but expect us to accept assumptions that no harm will come to the fishery.

When the fishermen met with Northern Pulp and its consultants the question was asked, "What happens to the effluent when it leaves the pipe, the response, "it goes away". So in other words Northern Pulp and the consultants did not know the answer which makes a person question why they would put any faith in a company that does not have answers to a proposed project that will have a great environmental impact for years to come. I have been fishing for 36 years and know the tides, how strong they are and have seen what destruction they can do. Northern Pulp thinks the solids that come out of the pipe will only affect a small area but they are wrong. The tide rises and falls so each time Northern Pulp's waste will spread a bit further.

In Section 12 of the Environment Assessment Regulations there are 4 considerations that the Minister should consider in making her decision as follows:

1. The location of the proposed undertaking and the nature and sensitivity of the surrounding area.

The Northumberland Strait is under the jurisdiction of the Federal Government so putting a pipe into the Strait now involves the Federal Department of Fisheries and Ocean.

2. Concerns expressed by the public and aboriginal people about the adverse effects or the environmental effects of the proposed undertaking.

The Pictou Landing First Nations and the public have many concerns and unanswered questions about this project since it has been proposed. The destruction of a fish habitat and the environment is of the utmost importance and critical. Once the environment and marine ecosystem is damaged it will create a negative ripple effect throughout the area that may never be repaired or take years to restore.

3. Steps by the proponents to address environmental concerns expressed by the public and aboriginal people.

Northern Pulp has never assessed the impact on lobsters before a pipe goes into the Strait so it may not be addressed for years once the pipe is in the Strait. Northern Pulp does not know the long term effects on Caribou Harbour if a pipe goes into the Strait.

4. Potential and known adverse effects or environmental effects of the proposed undertaking, including identifying any effects on species at risk, species of conservation concern and their habitats.

There are species at risk where the pipe is proposed to go through a rock crab nursery that provides food for the lobster fishery. There is also a herring spawning bed in close proximity to the proposed pipe.

5. Northern Pulp's proposed project for the pipe to go into the Northumberland Strait will not only affect Nova Scotia but it will also involve P.E.I. and New Brunswick. (Act, n.d.)

It is hard to believe that in this day in age the toxicity test that Northern Pulp performs is a number of fish are put in a bucket of treated effluent and if half of the fish die after 96 hours the test is fine. A 50% mortality rate with a toxicity test is unacceptable and meeting 25 year old PPER is certainly not good enough.

As a fishermen I love my job and all fishermen have worked very hard throughout the years to sustain the fishery because we all know how vital it is for our livelihood and for the future. The fishery and the environment go hand in hand and we know there is a balance that has to be maintained. The fishery can change from year to year as it has done for centuries so when the ecosystem is affected we take appropriate measures to

make it sustainable for future years. If a pipe is put into the Northumberland Strait the marine ecosystem will be negatively affected for years.

It is not always about **'good paying jobs'**, it is about doing the right thing for the environment. Our main concern should be about looking after the air we breathe, the marine ecosystems, and the forests. We have strayed so far away from doing the right thing for 50+ years by letting a company destroy what we should value the most.

There is much uncertainty regarding so many environmental issues with Northern Pulp's proposed project that have not been addressed. In conclusion the only appropriate way to move forward is to do a Federal Assessment.

Regards.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 3:28:55 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 3:38:20 PM

Project: replacement_effluent_treatment_facility_project Comments: Very supportive of northern pulps replacement effluent treatment system. Nice to see a company investing in not only Pictou County but also the entire province of Nova Scotia to grow our economy and improve their environmental footprint for the region as a whole. The registration documents show how much time and scientific evidence was put in to this project. The proposed project has been proven to work very successfully in many other parts of the world and can be done here as well. Recent upgrades to Northern Pulp such as the new participator to improve their environmental performance and maintain good environmental practices is just one example of their long term commitment to Nova Scotia. The replacement effluent treatment facility project is yet another huge example to improve and sustain a future for decades to follow. As mentioned previously, science has proven that this type of replacement effluent treatment facility ETF is used elsewhere with huge success. Very impressed with Northern Pulps commitment to improve their industry and their desire to do things right for a long future here. So much more can be said, but ultimately science has and will prove that this is a project that will be very successful for all stake holders and everyone else involved. Thank you Name:

Email: @hotmail.com Address:

Privacy-Statement: agree x: 68 y: 34

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's proposed Replacement Effluent Treatment Facility Project
Date: March 8, 2019 3:43:00 PM
Attachments: [Request for NS Env..pdf](#)

Please review my attached submission.

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Environmental Assessment Branch

Nova Scotia Environment

PO Box 442

Halifax, NS, B3J 2P8

Submitted via email: ea@novascotia.ca

08 March 2019

Dear Minister Miller

I write to you as a lifetime resident of Pictou County, to protect the Northumberland Strait and to end the half century of environmental racism that continues to this day in Boat Harbour.

Please reject the proposed Northern Pulp Replacement Effluent Treatment Facility Project due to the following:

Northern Pulp's Environmental documents use as an example a pulp mill in Tasmania, Australia which does not exist! How can this document be considered, in any way credible, on this fallacy alone? There is no mention of the amount of mercury that will be present in the effluent they propose to dump into the Northumberland Strait. The Northumberland Strait has economically provided for Nova Scotia, Prince Edward Island and New Brunswick, fisheries industries, tourism industry, transportation (Northumberland Ferries Ltd.) along with numerous small business along this beautiful coast. Our license plates states we are: "Canada's Ocean Playground".

Northern Pulp claims that damage will be minimal, how can they make such a claim when the Northumberland Strait is home to a very delicate ecosystem, it is Governments and citizens' responsibility to protect this ecosystem and the sustainable industries that it provides to the Maritime Provinces.

I have lived in Pictou County my entire life, leaving for education and work opportunities for 4 years and then returning to stay. My family summered on Caribou Island, and when I was between 4 and 6 years old my Mother, Aunts, cousins and myself would pick wild heather along the rocky shores of Caribou Island. By the age of 7 there was no more heather to be found along Caribou Island. I realize this may be a coincidence, but as I was born in 1962 and Scott Paper opened in 1967, I have often wondered if the air/water emissions from this industry contributed to the demise of the wild shrub, possibly making the air or the soil to acidic for the plant to continue to thrive. How will the effluent from Northern Pulp effect marshlands, and rivers and brooks? Once these are destroyed can they be remedied? What adverse effects will this have on all wildlife that have already lost their habitat to the clear-cutting, forestry industry here in Nova Scotia?

I respectfully request that this project be subject to a Federal Assessment as the Northumberland Strait is under the jurisdiction of the Federal Government and the *Fisheries Act* is Federal Legislation, not provincial. This proposed project by Northern Pulp, is not worth the risk and the precautionary principle means it is incumbent on the Nova Scotia government to err on the side of caution.

The Northumberland Strait has a delicate ecosystem which must be protected.

There has been no consideration given to the Town of Pictou Watershed, where the pipe will be put through.

The Pictou Landing First Nations, the Northumberland Fisheries Association and the public have raised many concerns which are not being properly addressed by Northern Pulp regarding this project. There has been no public consultations on this newly proposed site.

The potential effects on species at risk has been ignored, the proposed site of the pipe goes through a rock crab nursery which feeds the lobsters; there is a herring spawning bed in close proximity to the site of the pipe; not to mention other protected species such as piping plover, hawks and eagles How will these protected species be affected by not just the effluent, but the construction of this pipe?

I work in by-law enforcement for the County of Pictou, one of the aspects of my position is to remove, seal, whale, shark, porpoise carcasses from the coastline of the county. Has any thought been given to the protection of these incredible sea creatures? How many more species will die from exposure to these chemicals that will spill from this pipe?

As the tax payers have paid for this company for the past 52 years how much more are we going to pay for the pollution we have been subjected to, along with the rape our forestry, and now are we to pay for Northern Pulp to destroy "Canada's Ocean Playground" and the century old industries it has provided? How in 2019 can this be condoned in a leading country of the world?

Please right the wrongs of the past half century, please hold this company to a higher standard and protect our province, our children, and their future by calling for a full Environmental Assessment Report on this proposal; and close the effluent treatment facility in Boat Harbour on January 31, 2020 as scheduled.

Respectfully submitted

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 3:47:45 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

There has been some (truly) wonderful activism in support of our local environment that I encourage to be heard. However, as members of your department will surely know, much of the inner workings of industrial activity is complex and fraught with constant decision-making around finding the right balance. In the case of Northern Pulp, I strongly encourage the Department to adhere to the Act as Unifor has highlighted in its submission and proceed with studies and testing to protect our water, while encouraging the development of our forestry sector - a cornerstone of which is the Northern Pulp mill.

Signed by:

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 3:48:43 PM

Project: replacement_effluent_treatment_facility_project Comments: I think it is an astonishing step backward to still consider that the solution to pollution is dilution. Some of the most deadly compounds known to man are released in pulp mill effluents Dioxins, PCBs, heavy metals etc. These chemicals are known to preferentially bioaccumulate in the marine food chain fish, lobsters, tuna etc After 50 years of condoning one of the worst mills in N. America, we have the chance to redesign an efficient replacement mill. I personally think this is truly a Canadian issue and that a thorough federal environmental review is necessary. Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 63 y: 21

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp 's Replacement Effluent Treatment Facility Project
Date: March 8, 2019 3:57:29 PM

Dear Minister

I am writing this note in regards to Northern Pulp's Replacement Effluent Treatment Facility Project.

Our family are proud Nova Scotians with strong connections to Pictou and Pictou Island for many generations. I am one of four children raised in beautiful Nova Scotia. My Parents and my three siblings, are currently raising families in this wonderful province. I am currently living in Alberta were I fear some decisions are not in the environments favour for the future generations of our people.

How can a daily dump of nearly 100 million litres of effluent, of unknown composition, not have a negative impact? How could any additional toxins in our environment and food chain be deemed safe in a globally warming environment? What is the risk assessment associated with constructing and maintaining a 15.5 km pipeline going overland and then through Caribou Harbour? Why do we as a province continue contributing to the all the questionable decisions that have allowed the Northern Pulp Mill to begin and continue operations ?

Coming form a family of Fishers, has any study or monitoring effects on lobster larvae or any other species in the area even though it was strongly recommended internally and by multiple fisherman associations?

The proposed treatment facility on Abercrombie Point is very close to both the de-commissioned Canso Chemical plant site, and the secure landfill both of which have tested positive to high concentrations of Mercury (Baxter, 2019). Mercury, along with other dioxins were not mentioned in the EA even though there is a high risk of them being disturbed by the construction phase

Please give me a reason to continue to be proud Nova Scotians who encourages to sustain our fisher heritage, protect our natural resources and support sustainable industries that protect our future. Please allow us to be proud of the principles and values of this government that become evident in your decision making process.

Please see the attached of my Grandfather who is no longer with us, make him proud PLEASE.

Thank you for your consideration.

Daughter of a fisher

Sister of a fisher

Friend of many fishers and pulp mill workers

Proud Nova Scotian from afar who adores the beautiful shores of the Northumberland Strait every summer.

Picture removed as per Section 20 of FOIPO Act

From:
To: [Environment Assessment Web Account](#)
Subject: Concerns
Date: March 8, 2019 3:59:11 PM

To who it may concern;

I am a 17 year old who is very scared for what could happen if this pipeline is allowed. I believe that putting a pipe in the northumberland straight will be a devastating mistake. It could be destroyed by ice or other factors or if is not monitored daily it will be to late and catastrophic. We will never truly know what it will do to our gorgeous straight and how it would affect the fishing industry. We have a cottage along the straight and I want me, my cousins and eventually my kids to be able to keep swimming, fishing, catching hermit crabs and playing in the ocean without being concerned about contaminated waters. We already have to breathe in all the toxic air and smell the fumes. It turns people away from even being able to tour Pictou. Fifty years of environmental racism is shameful and it is time to resolve this issue. Honour the Boat Harbour act. We need to get a Federal Assessment too not just a Provincial assessment. No more extensions. Please take all the facts from all your emails your receiving and think long and hard about this matter. Enough is enough and more needs to be done to prevent this toxic waste pipeline from going in our ocean.

Thank you,

Sent from my iPhone

From:
To: [Environment Assessment Web Account](#)
Subject: Class 1 Environmental Review Northern Pulp
Date: March 8, 2019 4:35:17 PM

The body responsible for caring for the well-being of Nova Scotians is the government. Of greatest importance in exercising these responsibilities is prioritizing them in the best possible order. Pundits on very different sides of an issue will suggest they are bringing a balanced approach and the decider will promote their decision as carefully weighed and well balanced. This is the reality of the debating and deciding game.

This submission is from a retired Math and Physics teacher. One of my sons has a PhD in Land Resource Management with a focus on waste water management and air quality. Although I have some understanding of the issues under consideration, I would speak under the Dunning Kruger effect if I were to get into the weeds on this issue. With all due respect most politicians, and for that matter jurists, operate under the danger of Dunning Kruger and must seek to carefully and objectively weigh the evidence in order to make the best decision. I will rather concentrate here on your willingness to ask some of the relevant questions and honestly seek their answers.

The significant human well-being elements related to the pulp mill include jobs, economic activity, air quality, water quality and the environment. These must be examined looking at impact and sustainability. In your deliberations it would be wise to keep in mind the old adage; "In theory, theory and practice are the same, but in practice, they are not".

I have a good friend who is a retired lawyer and who has been a back-room boy in politics for many years. He believes that accepting environmental degradation is necessary for human progress. As a good lawyer, he tends to look at the outcome he wants and argue the points that support that decision. He also regularly advocates for a balanced approach, but his balance is very different than mine, and I believe the majority on Nova Scotians.

Stephen McNeil and the Liberal Government have undertaken a number of bold initiatives since taking power. I was impressed that, without delay, he put the cleanup of the MV Miner behind us. Creating the NSHA and doing away with local school boards was even more bold. There is also a big decision coming on whether to proceed with OPOR. And now, there is a huge decision to be made related to Northern Pulp.

Legislation was passed that Boat Harbour would be closed as a site for Northern Pulp by January 2020. Northern Pulp was given a five year window to propose, design and build a new effluent processing system. That wealthy corporation had the resources to make all that happen within the generous time frame provided. Pictou Landing First Nation was placed in the economic and social crosshairs if Northern Pulp needed more time. It is my belief that Northern Pulp, as did its ancestors, dragged its feet so that the government would be under the gun to make a hasty decision. Their five year strategy is playing out exactly as they planned.

As I pointed out, the right questions and their honest answers are important. Here are some of mine, but certainly not all that should be asked.

1. Given the legislation, regulations and magnitude of this project why was a Class 1 rather than a Class 2 EA deemed to be adequate?
2. A Federal EA is considered necessary for the cleanup of Boat Harbour, which was deemed to have undergone careful study when put in place in the late sixties. There have been significant toxic impacts by Northern Pulp's effluent on Boat Harbour, in spite of the assurances of politicians. Why should anyone believe an extensive EA either under Provincial

- or Federal oversight is not currently necessary?
3. Given the reports of considerable existing pollution, is it possible the proposed effluent treatment facility can be safely built and operated on the Northern Pulp's site?
 4. If legislation requires decisions on environmental impact to shade toward the cautious side, how can it be known, without doubt, if a continuous flow of a huge amount of effluent will not have long term impacts?
 5. I have spent many years sailing and boating at Amherst Shore, far from Pictou. With an easterly wind I can smell the airborne effluent from the Northern Pulp Mill. Although this is not science, is it not evidence that either air borne and/or liquid effluent affects a significantly large part of Northern Nova Scotia?
 6. Has the government honestly examined the historical records of actions and promises made by the corporation and governments versus the results that occurred? I have heard it said that history repeats itself.
 7. Given the reported impact the closure of the Northern Pulp would have on the forestry industry, has the government done a comprehensive study of how that industry could transition to new uses of their products if Northern Pulp closes?
 8. Regardless of whether the mill closes the port of Halifax will survive. Has the export potential for forestry products, in the event that the mill closes, been adequately studied?
 9. Has an impartial financial analysis of the tax payer's obligation to Northern Pulp and for environmental remediation been completed, both short and long term?
 10. Has the impact on human health of those living close to the pulp mill been properly considered?
 11. There is some evidence that current levels of pollutants acceptable under federal guidelines may not be inadequate now and going forward. The legislation is slow to catch up. Is it OK to just meet current standards?
 12. The government and Northern Pulp have had a lot of points of contact on this file. Has there been an adequate effort by the province to engage with groups opposed to the project to ensure a level playing field?

I have concerns that the government's acceptance of a Class 1 EA suggests that the decision on the the mill may already been made. It suggests that Northern Pulp has, once again, put the province in a tough position. It has created the conditions that bring the minimum amount of scrutiny on the project. I believe that history shows that the Pictou Pulp mill has, on a number of occasions, manoeuvred the province into both a financial and environmental corner and that may well be happening again.

Hopefully a fulsome examination of all aspects of this issue, including all stakeholders, will be examined, weighed and contribute to the best possible decision. I put some effort into being reasonably well informed about the issues that are important to Nova Scotia. It is my belief that an informed and reasoned decision on the future of the Northern Pulp Mill would be to bite the bullet and allow the mill to close. I also believe that the majority of Nova Scotians would, not only support, but applaud you for doing so.

Respectfully submitted,

Sent from my iPad

From: @yahoo.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 5:16:41 PM

Project: replacement_effluent_treatment_facility_project Comments: I do not agree with sending partially treated effluent into Northumberland Strait, where it can potentially pollute the waters of five provinces, and risk the destruction of the lucrative fisheries. Boat Harbour must close, and possible also the mill. Name: Email:
@yahoo.ca Address:

: Privacy-Statement: agree x: 52 y:

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 5:18:43 PM

Project: replacement_effluent_treatment_facility_project Comments: I have lived most of my life in Pictou and surrounding area. My family has always love living on the Northumberland Strait, spending a lot of time on beaches, swimming and walking, and boating. My husband and I have sailed for 50 years using both the Pictou and Caribou Harbours. We have sailed north and west to Shediac, NB and many ports in PEI and east to the Brasâ?Tdor Lakes. In the Northern Pulp report on page 440, they discussed the Odour reduction was a priority. They have stated that the new Effluent treatment plant will reduce the odour to a non issue. Then we should have an independent company travel to Sweden or Germany to one of the plants that as comparable to Northern Pulp and get samples of their effluent. 2 samples. First before leaving the treatment plant and again at the output or diffuser. Then we would have proof of what we would smell and what toxins were in the effluent and the quantities of each. Because of the fact that many people cannot believe the information given by NP I believe this would give actual results. Also I want to point out that the closest weather station is actual at the end of Caribou Island and should have been used in the report about the water temperatures, Air temperatures, and wind. I donâ?Tt understand why NP would use Lyons Brook weather station. Thank you for reading my thoughts on this very important project. Name:

Email: @gmail.com Address:

Privacy-Statement: agree x: 51 y: 27

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 5:30:33 PM

Project: replacement_effluent_treatment_facility_project Comments: I am a family physician who lives and works in Pictou County. I have no direct connection with Northern Pulp, the fishing industry, or the woodlot industry. I care deeply about Pictou County and the health of its citizens, which is my motivation for writing this submission. I am in support of the Pipeline project, assuming it meets current environmental standards. Employment status is one of the most important social determinants of health. Over my 28 years of medical practice in Pictou County, I have witnessed the ups and downs of many of our industries, and have seen firsthand the detrimental effect that unemployment has on the health of individuals and the community as a whole. If Northern Pulp ceases to operate, it will have a significant negative health impact on many of our fellow citizens. I also care deeply about the environment and do my best to live a "green" lifestyle. Despite my attempts, however, I am aware that every time I hop in my car or cut my lawn, I am having a negative effect on the environment. It would not be realistic to for me to have zero impact. Likewise, it is unrealistic to insist that an industrial project have zero impact on the environment. The practical approach is to determine to the best of our current scientific knowledge what the environmental impacts of a given project are likely to be, and if they fall within currently acceptable parameters. If the project falls within our accepted guidelines, it should be permitted to proceed. There are many individuals on both sides of the pipeline debate who feel angry and threatened for various reasons. Debates are often understandably emotional and biased. That is why I feel that this project should be judged on the science as we know it and today's environmental standards, and not on the fears and mistrusts of various stakeholders based on decisions made in a different time. I trust the committee will do this and I am hoping that this project will go ahead. Name: Email: @ns.sympatico.ca Address:

Privacy-Statement: agree x: 67 y: 23

From:
To: [Environment Assessment Web Account](#)
Subject: Northumberland Strait
Date: March 8, 2019 5:47:32 PM

I'm writing in support of a Federal Environmental Assessment of Northern Pulps proposal to put a pipe discharging effluent into the Northumberland Strait.

The Northumberland Strait is where My family spend our summers. My mother, sister, brother, aunts, uncle, cousins and friends all enjoy the clean beaches and water of the Northumberland Strait. More importantly, we eat fish from the Strait. The potential environmental impact along with the loss of the fishery and tourism should be enough for this government to order the federal assessment.

Regards,

Sent from my iPhone

From:
To: [Environment Assessment Web Account](#)
Cc:
Subject: Submissions of the Friends of the Northumberland Strait in Response to the call for Public Comments on the Environmental Assessment of the Replacement Effluent Treatment Facility Project
Date: March 8, 2019 5:55:13 PM

Good afternoon,

Please see the attached link enclosing comments in regard to the Replacement Effluent Treatment Facility Project proposed by Northern Pulp Nova Scotia Corporation.

<https://ln.sync.com/dl/9f1fb53a0/vkf5tuqc-ke3dmtqa-tv9y46ia-eu8hc9sg>

Please confirm that this link has been accepted by the Environmental Assessment Branch at your earliest convenience. If there should be a technical difficulty, we shall arrange for alternate submission.

Best regards,

Legal Administrative Assistant/Office Administrator | [Ecojustice](#)
520-1801 Hollis Street, Halifax, NS B3J 3N4
1-800-926-7744
F: 902-417-1701

[Ecojustice is Canada's largest environmental law charity. Help us build the case for a better earth.](#)

This message may contain confidential and/or privileged information. If you are not the addressee or authorized to receive this for the addressee, you must not use, copy, disclose or take any action based on this message or any information herein. If you have received this message in error, please advise the sender immediately by reply e-mail and delete this message. Thank you.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 6:06:35 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

In my option, everyone should be celebrating the incredible advancements being taken here to protect our environment. After the new effluent treatment facility is completed and the oxygen delignification process is added to the mixture, I think the owner will be leading the pulp and paper industry with remarkable numbers that will far exceed any standards set in the world. I'm also very pleased that the boat harbor clean up is coming in the future for everyone. I'm confident that there could be even more positive environmental tasks completed at the Northern Pulp site in the future, if we decide to work together with this valued employer in Nova Scotia today. We all want the same things, we all live here in Nova Scotia and the Northumberland Strait belongs to all of us and no one wants to hurt the Strait. My confidence comes from trusting the men and women that work in the Oceans and Fisheries Science Divisions of Canada, who are doing constant studies of our Strait everyday to ensure our ecosystem and environment is protected. Thank You for taking the time to read my option.

Signed by:

@northernpulp.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 6:11:46 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

My parents owned a cottage that was located between Boat Harbour and Lighthouse Beach. We remained at the summer dwelling until . I was a teenager and I watched the water, and marine life change with the discharge . Nature was destroyed. Why can't this pulp mill and the government have a better solution for the waste , it is 2019 and not 1967.

Signed by:
@gmail.com)

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 7:22:19 PM

Project: replacement_effluent_treatment_facility_project Comments: Honorable Minister, I am writing to offer my support for Northern Pulps new effluent treatment project. This new system will incorporate the best modern technology and science available and will allow Northern Pulp to continue to operate into the future and reduce its environmental footprint. I am confident this onsite facility in its operation will allow this company to continue to not only meet but exceed any guidelines as set by Dept of Environment, Provincial or Federal, today and in the future. This project is a milestone for the Pulp and Paper industry in Nova Scotia and will allow forestry, fishing, and community to coexist. Name:

Email: @ns.sympatico.ca Address:

Privacy-

Statement: agree x: 57 y: 26

From:
To: [Environment Assessment Web Account](#)
Subject: NP Environmental Assessment Concerns
Date: March 8, 2019 7:22:32 PM

Dear Minister of Environment...and Protector of the Future for Young Nova Scotians:

While the latter might not be your "official title", it certainly describes the effects of your decisions and who they will actually impact the most.

I read through some of NP's Environmental Assessment and the biggest thing that jumped out at me, was that the assessment is incomplete! Throughout the document, Northern Pulp promises/assures that the effluent will not cause harm to the environment. On CBC, I listened to workers of the mill assure people and cameras, that "the effluent will be some of the best effluent in North America." However, in the company's environmental assessment, it states:

At this time, effluent chemistry characteristics (***including the specific substances present in treated effluent and their anticipated concentrations***) will not be known with certainty ***until the project is operational.*** (p. 489)

I am an educator (currently living in _____ born and raised in Pictou) and I always encourage my learners to "back-up" their answers. I want them to show me evidence of their thinking, and if we're talking science, I want to see results from experimentation. It appears to me, this is a step that was missed out in Northern Pulp's Environmental Assessment! Where is the data saying what the effluent is made of? The science that shows exactly how it's going to be treated and its effects on the environment? And what about the lobster larvae tests that should have been done to reassure scared fishers that there is, in fact, nothing to worry about?!

Putting the pipe in the water and then waiting to see what happens, is not acceptable and it shouldn't be allowed - just based on the lack of effluent science alone!

In its 'uncertainties', this pipe would threaten and/or violate several of the United Nations Sustainable Development Goals - something that you wouldn't expect to see in First World Canada, but alas, here I am writing you this letter, hoping for an outcome that values:

- Life on land;
- Life under water;
- Good health and well-being;
- Clean water and sanitation;
- Sustainable cities and communities;
- Responsible consumption and production;
- Climate action.

It doesn't seem worth it, to jeopardize all of the above, for an out-dated pulp mill that created the biggest case of environmental racism in the province. It's time we create opportunities for woodlot, sawmill owners and pulp mill employees to get together, be thinkers, and innovate for the future. I mean, how is Nova Scotia curbing the global

temperature rise of 1.5 degrees? Not putting in a pipe and shutting down a nasty precipitator would be one step in the right direction! :)

Please, please, please do right by Nova Scotians, our youth and our natural environment - no pipe in our Strait!

Kindest regards,

From:
To: [Environment Assessment Web Account](#)
Cc:
Subject: Response to Northern Pulp's EA Application
Date: March 8, 2019 8:11:20 PM
Attachments: [NP EA comments.doc](#)

Attached are the same comments that are in this email. I wasn't if there would be an issue with fomatting to I put it in both places.

Dear Premier Stephen McNeil and Minister for the Environment Margaret Miller,

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility project.

My name is _____ I grew up in Pictou, moved to Halifax in _____ and then moved back home in _____
I have followed and been very involved in most things related to Northern Pulp since 2013.

I know you are aware of the history of the pulp mill. I would like to use a brief summary of what I have witnessed as my preamble to why I oppose this project and will express my concerns. I feel their history is important and should be considered when trusting them with a project of this immense stature and historical significance.

Back in 2013, before Northern Pulp had their electrostatic precipitator installed, NP's emissions amounted for 63% of all particulate matter released in the province. They were allowed to exceed limits because a ministerial order allowed them to do so while they were working towards compliance. People in the area including area doctors and the Nova Scotia Lung Association complained that this was not acceptable. Northern Pulp's response was 'give us a chance, we need more time'. While their recovery boiler was failing stack tests, so were the stack tests for their power boiler. The following year they upped their emissions to 78% of what was being released in the province while hitting production records. That was the year of the pipe leak.

In June 2014, Northern Pulp had a leak in their effluent pipe that took a couple of weeks to clean up (1). When the numbers were initially released we were told that there was 4-5 million litres that had spilled onto Mi'kmaq burial grounds and into the Northumberland Strait. Through the federal investigation, it turned out to be 47 million litres. Northern Pulp's negligence to properly maintain this pipe lead to the Boat Harbour Act. Without the Act, Northern Pulp would likely have had to close. The closure date was set for Jan 31, 2020 and mill officials said they would honour the act and honour the closure date although they admitted that they found the date rather tight.

With their next Industrial Approval looming, NSE set water reduction targets. Once the approval was put forward, Northern Pulp threatened to sue the government over the reduction targets. The govt eventually allowed for higher reduction targets. Northern Pulp has cited this litigation for being a reason for their late start despite the fact that they knew they couldn't operate without a new ETF to replace Boat Harbour and that they felt there was a time crunch. That is admission that NP chose not to start working on their ETF right away creating more of a time crunch.

After having the new precipitator installed, Northern Pulp were still failing their stack tests routinely on their power boiler. They no longer had to report the results and the only way to find the results were through Northern Pulp's Community Liaison Committee. When I contacted _____, NP and Paper Excellence's Communications Director, _____ said that I couldn't talk directly to the CLC. I had to ask questions, _____ would relay them to the CLC, they would respond to _____ and _____ would relay that back to me. Checking on each stack test after this, the response that I got on everyone from _____ was that they were passing. They were not (2). This resulted in a fine for \$697.50 and a directive that the company had to reveal their test results.

During this time, they could have filed for their EA submission but according to a recent FOIPOP they were busy demanding a 10 year Industrial Approval, despite not having gone one year without failing to meet at least one term of their Approvals and demanding that an increase in their water usage stating that they wouldn't go forward with their EA as these terms didn't work for them. Another indication that the time crunch was brought on by themselves. All along officials for the mill continued to state that they would honour the closure date.

Another recurring theme that has been presented by the mill is that the effluent will be cleaner than what comes out of Boat Harbour. According to recent FOIPOP, Northern Pulp's technical engineer admitted that the new effluent will be worse than the present effluent.

They finally announced open house dates to educate the public on their ETF plan. They put forward a plan that included a pipe that would go through the Pictou Harbour and have an outflow location in shallow waters with 6 ports spread over a distance of 125 metres in order to bring readings to background levels within 100 metres. They also showed in schematics an Oxygen Delignification system that one of their reps said would be crucial to the process at a cost of \$70M that would be completely funded by the Mill owners. Concerns that were raised that night included a very well publicised shipwreck that had been found and mapped in 2015 (3), the shallow waters of the area that would cause ice scouring and requiring 125 metres of release from start to finish to reach background levels within 100 metres. KSH consultants also seemed unaware that fishing took place in the area where the outflow pipe was to be located.

FOIPOP information showed that by May 2018, Northern Pulp knew this plan would fail because of the shipwreck and ice scouring. This is just speculation but it seems being that this information was readily available that there was a planned failure to create even more of a time crunch. In July, they said they would file an EA submission on their ETF in the fall while admitting they knew the shipwreck was there all along (4).

Early in 2018 there was an ash spill resulted from a pipe leading to the power boiler that received an environmental directive. The big news on pipe leaks came on Northern Pulp pipe leaks came in October when NP had another large raw effluent leak that took more than two weeks to clean up. The amount is currently not known to the public because it is currently under investigation. A key point to note with this is the manner in which the leak was found. The mishap was discovered by someone randomly walking

their dog through the woods. This is very similar to how the 47 million litre leak that precipitated the Boat Harbour Act and brought assurances from the mill that this would not happen again(5).

Northern Pulp didn't plan for new survey work for Caribou Harbour to take place until the end of October into November. Adding this new component by not starting the survey work so late would have resulted in NP not being able to submit until January 2019 at the earliest. The fishers and the First Nations blockaded work against the surveyors. Despite all of the delays that NP created for themselves and their filing in January 2019 which followed a time line that, as stated, they created, they blamed the fishers blockade as a major reason for the delays.

After years of saying that Northern Pulp would honour the Boat Harbour Act, announced on Jan 31, 2019, along with their EA submission, that they would seek an extension on the use of Boat Harbour indefinitely while also stating that the continued sad history between the Mill, the Pictou Landings First Nations and Boat Harbour could no longer continue (6). A statement that completely contradicts itself. To add to that she stated that the Pictou Landings First Nations and Northern Pulp had shared goals. This announcement was made on the day the PLFN were celebrating that Boat Harbour would finally be able to be returned to what it was before it was stripped from them five decades ago. Despite the Boat Harbour Act negotiated by the NS govt and the PLFN that five years before gave Northern Pulp a fighting chance at continuing while clearing the way for Boat Harbour remediation, Northern Pulp and the PLFN clearly don't have shared goals anymore.

From a personal perspective of this process, a couple of the questions that I submitted to Dillon Consulting were "What is the effect this effluent will have on lobster?" and "Will there be testing done with the proposed effluent on lobster." In the EA there is a section that lists questions that the public submitted. Those questions don't appear there. In fact, there is not one reference to studies done on lobster in the entire EA because they never completed any.

My concerns with Northern Pulp's EA submission for their ETF broken down into sections:

- 1) The process
- 2) The pipeline route
- 3) The outflow location and plan
- 4) air emissions
- 5) ETF location
- 6) Integrity of the proponent, ability to comply with the Industrial Approval
- 7) Impacts on Fishing and Economic reasons
- 8) municipal laws and other factors

1) The Process

A class one assessment was chosen for this project. According to then Minister for the Environment Iain Rankin that classification was automatic (7). Looking at Nova Scotia's guidelines on classifications of environmental assessments, a class two definition is described as "undertakings are typically larger in scale and are considered to have the potential to cause significant environmental impacts and concern for the public... These undertakings require an environmental assessment report and formal public review which may include hearings." (8)

Northern Pulp's submission is approximately 1700 pages for an ETF that will cost about \$130M of taxpayer money IF the court case between the province and Northern Pulp against the First Nations reverses a decision that found that the province had to consult with the First Nations before money could be handed to Northern Pulp. This project will have lasting effects on both the forestry and the fishing industry for decades to come. That should be by definition 'larger scale'. There have been Class two assessments for projects in this province before. To get a better understanding of perspective on the Class one decision, where does the government see Northern Pulp's ETF submission in relation to those other projects and what were those other projects that warranted more scrutiny in terms of scale?

A plan with the capacity to pump up to 85 million litres of effluent into prime breeding grounds of the Northumberland Strait not only will cause a significant environmental impact but also has drawn a large concern for the public. The Land and Sea rally brought over 3000 people and 200 Boats to Pictou for a protest (9). Thousands of letters representing First Nations, Fishers, Citizens, Tourism and Fishing Associations from 3 provinces and 19 Federal Senators have been sent to the federal government asking for a federal assessment. This demonstrates 'concern for the public'.

Mr. Rankin's decision on the project warranting a Class one assessment can still be properly applied when present Minister for the Environment Margaret Miller conducts her review. The details of the project, possibly being larger than Mr. Rankin expected when he made his decision, can still face proper scrutiny under a class one as there is a caveat that allows "Other opportunities may exist if the Minister decides that a focus report or an environmental assessment report is required" (8) Barring either the submission being denied or an about face to allow for a Class two assessment, it would seem that adding the focus report or environmental assessment report would be the logical next step.

In Northern Pulp's EA submission they explain the process of informing the public. This included open houses, mail outs, press releases and the like. A major concern here is their original presentations reached a lot of people with details that are no longer part of their plan and the change in outflow location changes the amount of concern some people would have for the project. When the original open houses were conducted, the plan was to pump effluent to the mouth of Pictou Harbour. People who live in the Caribou area may not have been as concerned or followed the plan as the outflow wasn't going to be close to their property. With a submission of a 1700 page document, someone finding out about this large scale project would not have the time to decipher such an immense technical document in 30 days. Even on a recent episode of "The National" CBC had a graphic showing the proposed pipe going out through the mouth of Pictou Harbour instead of the submitted plan for the pipe going out Caribou Harbour (10). Northern Pulp's website that was set up to educate the public still has a lot information that is now incorrect due to their change in plans (11). Northern Pulp also set up a facebook group requesting that people have an open mind and ask questions. Shortly after that, they banned a lot of people who were asking questions and routinely delete comments of concern. Due to the level of effort made by Northern

Pulp to educate people on their original plan, there should have to be at least equal effort for Northern Pulp to consult and educate the public on their actual submission to ensure the public actually understands what NP plans to do and not rely on what NP had originally told them their plan was.

To this date, Northern Pulp still has not held an open house in the Town of Pictou even though their original plan was to have the outflow point at the mouth of the Pictou Harbour or with their submitted plan that has raised concerns over the plan to due work over and put an effluent pipe through the town's watershed.

During the original open houses, Chief Andrea Paul pointed out that there wasn't an open house scheduled in Pictou Landing. Northern Pulp agreed and after word got out, tried to discourage people who weren't from the PLFN from attending. Chief Paul correct that stating that anyone wanting to understand this project were welcome to attend.

There is a lot of concern over the perceived conflict of interest around the NS govt role in making a decision on NP's ETF approval with the indemnity agreement (12) possibly influencing Nova Scotia's decision in that the province could be financially motivated to find in favour of the proponent to avoid litigation. This was one of the reasons for requesting a Federal Assessment.

2) The pipe route.

The plan submitted has the pipe's route to go along the Harvey A Veinot Causeway, over Pictou's watershed along the Trans Canada Highway and out 4kms into the Northumberland Strait.

On page 11 it is explained that "An EA identifies potential environmental affects, proposes measure to mitigate adverse environmental effects, predicts whether there will be significant adverse environmental affects after mitigation measures are implemented, and includes a follow up program to verify the accuracy of the EA and/or the affects of the mitigation measures."

Early in the submission on page 12, it states that NP did not "facilitate full biological field assessments for the current proposed transmission pipeline corridor". It goes on to state that this nor studies on the marine environment weren't completed in time for their registration. Their 'commitment' to follow up shows that they recognize that this work is important to their submission. It continues on page 13 to say this work will be done in the spring and summer. If it's important to the submission, then it should have been completed and included in the submission. How can the quote in the previous paragraph be followed if studies have not been completed?

One of the first issue with the pipe route has to do with migratory birds. In the EA submission, it says that there is non significant affects on migratory builds yet from late April until early October, cormorants make the side of the Causeway their home. There is nothing in the EA that addresses this. Any construction of a pipeline would damage where they live and do them significant harm. This shows just one of the many potential omissions with relying on desktop studies instead of doing the actual work.

After you get across the causeway, you are moving the pipe across the town of Pictou's watershed. The construction of and the use of an effluent pipeline puts Pictou's source of water at risk. The town is in the process of its own major project to finally secure drinkable water for the citizens who have not been able to have drinkable water. Whether the risk arises during the construction or 50 years down the road, as mentioned in my opening preamble, Northern Pulp does not have a demonstrated history of showing either proper maintenance of pipelines nor monitoring for when damage of pipelines arise. This is a risk that is not worth taking.

The pipe then moves along the shoulder of the Trans Canada Highway near water courses and wetlands on its way towards where it reaches the Northumberland Strait. The aforementioned lack of studies on biological and marine environments and Northern Pulp's previously mentioned history is cause for concern here as well. With their not having done the studies and no plans to have them completed until the summer, I don't see how the NS Department of Environment can even make a judgement on the potential risk for this area.

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3) The effluent pipe's outflow location and plan

The plan is to extend the pipe about 4 kms from the shore through Caribou Harbour to an outflow location that appears to have a depth of about 40-65 feet made of mud, sand and rock (13). To put this depth into perspective, 60 feet 6 inches is the distance from home plate to pitchers mound on a baseball field. That's deeper than the original outflow point near Pictou Road but still not very deep. This is adjacent to the PEI ferry route and requires routine dredging do to shifting sand and silt. Dredging generally seems to be done approximately every 10 years (14). The end of the pipe itself will have three ports with a plan of dispersing the effluent, that as described by NP's technical engineer in the preamble, will be worse than what is coming out of Boat Harbour now. In the EA it states that the characteristic of the effluent will not be known until project completion. They know it will be worse, but don't know how bad and can't submit a testimony to that quality in time for NSE to make a ruling on whether it is okay for an ETF with a capability of producing up to 85 million litres of that unknown effluent each and every day.

The original plan called for six ports being required for the dispersal. The present plan calls for three ports. This is one of those facts that anyone going by Northern Pulp's open houses and distributed material are not aware. Under ideal conditions, this is supposed to bring the effluent to background conditions within 100 metres to meet Federal Guidelines. Although this trench is deeper than the original outflow location it is a narrow trench with a shifting bottom. It is also a very important area for among other like lobster, crab and herring, it also includes species of concern like Atlantic Salmon and Stripe Bass. Northern Pulp and their consultants/contractors have not completed the survey work for the area yet somehow concluded that there will be no adverse affects.

Concerns with this location that are not known include the affects that the shifting bottom will cause, the ability for the outflow pipe to remain free of mud and silt and the extent and characteristic of monitoring to ensure there are no issues. Monitoring on other components of NP's Industrial Approval are infrequent and lack any consequences that would motivate concern from NP. The indemnity agreement absolves the mill and its successors from harm. The province owns the effluent.

According to the EA, the effluent will contain 4,000 kg total suspended solids each day.

This would add to the build up that would end up in this narrow channel that is only about 60 feet deep.

Ice scouring was a major factor that prevented the first plan from working. Ice scouring and ice build up is an occurrence throughout the Northumberland Strait. Stantec's research has shown there to have been 133 features during their 2015 survey that was completed for the PEI-New Brunswick cable interconnection upgrade project (15). Just to reiterate the point, Northern Pulp have not completed their assessments on this and again have concluded there will be no adverse affects.

Page 21 of the EA shows that assessments by NP need to be completed for DFO in relation to fish habitats. "Geotechnical investigation will be completed in order to facilitate detailed design and provide sufficient information to estimate the harbour/marine footprint of the pipeline/outfall. Habitat assessment and preliminary proposed project footprint information will form a component of a DFO Request for Review to determine authorization requirements under the Federal Fisheries Act." If this study hasn't been done and DFO can't authorize the pipe due to concern over potential serious harm to fish, the province shouldn't be able to authorize the project as Northern Pulp wouldn't have been able to show that it would be operational before the decision by the Minister for the Environment is made.

According to CLC meeting minutes from Spring 2017, Northern Pulp required both the Boat Harbour ETF and the New ETF to run concurrently for six months while the biology developed in the AST system (B). According to page 81 of the EA, the commissioning phase would take between one and three months. This is concerning because it sounds like the timeline is being rushed to compensate for money that could be lost should the appropriate time be taken for the biology to develop.

4) Air emissions.

There's a section in the EA that addresses VOCs on page 141. In it Northern Pulp tried to discredit the findings that showed we have elevated levels of VOCs while trying to pass the blame off on a combination of Michelin and NSP Trenton. I found it interesting that the EA found it not credible because the study to which they referred went with "a statistical evaluation of ambient data in correlation with wind direction, without further site specific investigation" yet the EA surmised that the VOCs may have come from other sources like "transportation sources, or other industrial sources like the Michelin Tire plant or the Trenton coal-fired power plant, **presumably** all sources of VOC emissions to some degree." The EA also stated that VOCs had elevated levels when the prevailing winds were from the northeast of the mill. Given the locations of Michelin (to the west) and NSP Trenton (to the south) it would seem that there must be more validity to the data collected in the paper by Hoffman et al. than the 'presumption' that this EA submission is making. At the very least, it strengthens a case for having continual emissions monitors on not only Northern Pulp's stacks but possibly those of Michelin and NSP Trenton as opposed to making presumptions and allowing elevated levels of VOCs to continue based on the failed logic that, since you can't tell whether it's one or all three of the main sources of air pollution in the county, it doesn't require further investigation.

Emma Hoffman recently defended Northern Pulp's presumptions in a recent article for The Examiner. (A) " Northern Pulp's EA also stated that the study did not attempt to rule out the contributions of other potential sources. But Hoffman, Guernsey, and Walker say this "is clearly not a true statement," and that the study did not disregard other potential sources of VOC emissions. The study openly acknowledged and discussed in detail the other potential local emission sources in the area, including a coal-fired generating station in Trenton and a tire manufacturing facility. The study even provided a map indicating these other potential sources relative to the Granton NAPS site." Just because Northern Pulp states something, doesn't mean it's true.

With the new ETF, sludge is to be dewatered and burned in the power boiler. This will cause an increase of about 5% more pollutants in coming from the power boiler. Northern Pulp has only managed to stay under the emissions limits as laid out in their Industrial Approval for just over a year now which only spans six tests. Again, a change like this with a company that has a reputation for failing its emissions tests would warrant Continuous Emissions Monitoring system in place. Page 148 even has Northern Pulp stating that they believe there should not be increased monitoring despite the adding of a new element to what they are burning in their power boiler. This demonstrates that they don't want more scrutiny on part of their process that has failed in the recent past.

The EA states that they won't know the effluent's chemical makeup until after the project is complete. If that is the case, how can they know the chemical makeup of the sludge that they plan to burn in their power boiler? What will that chemical makeup be once it becomes airborne? How will that increase the level of VOCs in the area?

During the open houses a key component that also appears pictured in the EA submission is the Oxygen Delignification system. Consultants said that this would cost about \$70M and be paid for by the mill owners. In the EA it is highlighted in a different colour and it says that it would be built in the future. If this is a key part of the operation to reduce emissions, smell and make the effluent better (which as we covered before, is actually going to be worse) why is it not part of this project? With the length of time it is taking Northern Pulp to get this \$130M project underway where they may not even have to foot the bill, I am concerned that this promised oxygen delignification system will not come to fruition.

5) ETF Location

The plan is to locate the ETF next to where Canso Chemicals was/is. Knowing the history of the missing mercury, what sort of excavating/site cleaning will go on here? I have concerns over any chemical from or near the former site being unearthed. Who would oversee this work? I would expect it would be some third party agency like NS Lands who have experience with this sort of work. What would be the process for doing any of the clearing? Knowing the concerns facing the removal and disposing of anything on the mill property or on the property of Canso Chemical be treated with the same care that is being applied to Boat Harbour which received both a Class Two provincial assessment as well as a Federal Assessment? If not, why not?

I did not find a mention of mercury in Northern Pulp's EA submission and considering the history that the two properties share, that should have been given consideration and seems perplexing with its absence. Is there any chance if this place isn't excavated properly, that any mercury that is on site could seep into the sludge and end up burned in the power boiler?

Are Canso Chemicals, it's current or previous owners protected by the Indemnity Agreement? Are people who are connected to Canso Chemicals that are also connected to the mill held free of harm should any wrongdoing be uncovered that relates to their connection to Canso Chemicals?

6) Integrity of the proponent, ability to comply with the Industrial Approval

Any decision to grant an approval on a project like NP's ETF should take into consideration the people in charge of the work and overseeing its operation. If I were to submit this identical proposal, I wouldn't expect NSE to grant my approval because I have not demonstrated the capabilities of completing a project of this size.

Northern Pulp has had about a dozen infractions, ministerial orders and pipe leaks. They are on Canada's Environmental Offenders registry. They are currently still under investigation for their most recent pipe leak. I realize the timing of Northern Pulp's EA submission and the 30 day public consult period followed by the 20 days to make a decision period was not precipitated by actions of the Minister for the Environment or NSE. Making a decision on granting a project of this magnitude prior to completing an investigation for an event that could lead to criminal charges just doesn't sound prudent. It feels akin to making a decision to leave your child with a babysitter this weekend even though you know a decision on child abuse charges for that babysitter will be announced the following Monday.

Any approval for this project hands over responsibility for monitoring and maintaining operations this project to a proponent with a horrible track record who has stated in a number of spots in this EA that studies that it agrees should be done, have not been completed.

Northern Pulp, as explained in my preamble, have a demonstrated history of saying one thing and doing something different. Examples previously given and cited include failure to do proper maintenance and monitoring of an effluent pipe.

Concerning is the combination of lax regulations, lack of monitoring and weak enforcement and penalties that was cited by the auditor general (16) not only in general in this province but how that applies to Northern Pulp. During the installation of the precipitator, NP was allowed to keep operating because it was "working towards compliance". That took a few years. That is not acceptable. When talking about an effluent pipe that could put the ecology of the Northumberland Strait and its corollary fishing industry at risk, allowing a mistake to continue for years while working towards compliance is not an acceptable option. If there is a malfunction that is noticed, what steps are going to be taken to properly empty the 15km pipe before its contents are pumped out into the Northumberland Strait?

7) Impacts on Fishing and the Economy

One of the big rallying cries from Northern Pulp has been what the closure of Northern Pulp will do to jobs in the province. Stepping away from the very real fact that the dilemma of Northern Pulp closure has been brought on by their neglect of their effluent pipe followed by their not coming up with a suitable replacement plan for the Boat Harbour ETF, jobs are important. What seems to get lost in all of this is the fact that fishing and tourism jobs matter as well. Those industries are not doing anything to put Northern Pulp's business in peril. Northern Pulp did that to themselves.

There are about 300 people who work for Northern Pulp. Their economic activity accounts for 5 indirect jobs for everyone direct job so a total of about 1800 jobs. There are over 3000 fishermen who work in the Strait. Applying that same metric would mean 18,000 jobs would be at risk if we kill the Northumberland Strait fishing industry. Tourism was not even considering in Northern Pulp's submission.

In 2003 Alberta had a case of mad cow disease (17). This was estimated to have caused a \$5B hit to beef producers. Stewardship over fishing happens in much the same way. If one lobster is contaminated, just like the Alberta mad cow incident, hamper the Atlantic region's ability to sell seafood. It took about two years before Alberta was allowed to resume business as usual. It took remedying the situation and reassuring the markets Alberta beef was safe to eat. Those factors would not be in play with Atlantic seafood because we likely would still be pumping the effluent that caused the problem each and every day over that two year period and continue until the end of the life of the mill.

Northern Pulp exported about \$220M in product in 2017. Fishing topped \$2B last year in exports. Tourism on the North Shore topped \$200M with the NS economy growing by about a half billion in the last few years to the \$2.7B mark (18). The Ivany Report set a goal of expanding tourism to \$4B. Nova Scotia's brand is based on the lobster and being Canada's Ocean Playground. We have the warmest waters north of the Carolinas due to the Northumberland Strait being shallow and warming quickly in the summer. If we develop a reputation sick lobster and unswimmable waters, there goes fishing and tourism.

On page 110 of the EA, Northern Pulp draws the conclusion that there will be no harm to the commercial fishing industry without doing any tests on fish.

8) Municipal laws, PLFN and other factors

Currently, Northern Pulp does not have permits for running a pipe through the town of Pictou or the County of Pictou. I do not believe a project should be given the ok until these can be obtained.

At the start of this process we've heard repeatedly about the indemnity agreement, Nova Scotia taxpayers being on the hook for costs and negotiations being ongoing when it comes to who is paying for the ETF project. In the fall, a Supreme Court decision came forward that the province would have to consult with the PLFN on any funding that would go to Northern Pulp (20). Northern Pulp has recently joined the province in its fight against that decision although the current situation is that Northern Pulp will not get money from the province to pay for this ETF project. Being the current situation, Northern Pulp should not be allowed to move forward on this project without showing that they would completely fund this project.

At least fifteen First Nations fishermen, fish out of the area of the outflow pipe. "The Supreme Court of Canada confirmed that the Mi'kmaq and Maliseet First Nations continue to have treaty rights to hunt, fish and gather towards earning a moderate livelihood. These Treaty rights must be implemented. Along with these treaty rights, First Nations maintain that they continue to hold Aboriginal rights and title throughout their traditional territory. This creates a special situation unlike any other found in Canada. There is no model or generic approach to follow on how to proceed in these negotiations. All parties must be prepared to consider how to devise a negotiation process which meets everyone's circumstances, needs and interests." (21) This would seem to indicate that if the Mi'kmaq of the Pictou Landings First Nations are not in agreement with risking their ability to fish in this area where they hold Aboriginal rights and title, then the NS govt can't approve this project.

My understanding of the Boat Harbour extension that was signed by then Premier John Hamm may not have been legal and faces future legal challenges. I believe that should be dealt with before any 'compensation' on ending the Boat Harbour lease before 2030 should be given.

On page 70 Section 5.2.1 it says that Northern Pulp will be in charge of monitoring effluent quality discharged to the receiving environment. They are supposed to be in charge of that now and that has led to two large raw effluent leaks in less than five years. I believe they've demonstrated an inability to complete these tasks.

Page 82 lists a number of things that Northern Pulp should have completed before filing let alone obtaining approval. They include: various approvals, avian/turtle studies, MEKS field studies, Archaeological shovel testing for pipeline, geotechnical land surveys for land portion of pipeline, marine seismic testing, habitat and confirmation of marine pipeline alignment. Still no mention of testing effluent on creatures like lobster, crab, Atlantic Salmon, striped bass...

I do not believe the effluent test of putting ten trout in a bucket of effluent for 96 hours to see if more than half survive could ever be described as adequate testing regulations to meet effluent quality. Throwing that kind of testing at our fishing industry is plotting a course for disaster.

On page 106 of the EA, NP states that neither the Fishermen nor the PLFN offered any input to the outflow location evaluation other than expressed opposition. This seems to try to discount their opposition to a pipe going into the Northumberland Strait as the Fishers and the PLFN not helping with the decision. At the open houses, NP was told by the fishers and PLFN that the water was too shallow and there would be ice scouring. The prevalence of ice at the Caribou Harbour location would not be much different. Either way, a plan that would put their fishing livelihood at risk was not going to be

acceptable. The fishers' associations even offered to help cost share any project that didn't involve putting a pipe into the Northumberland Strait. Basically, this amounted to the fishers and PLFN evaluating the plan based on their vast knowledge of the Northumberland Strait as a bad idea and Northern Pulp disagreed based on their wanting to put a pipe in the Strait.

My Conclusions.

I believe the repeated mentions of studies that have not been concluded demonstrates that the proponent has still not completed all of the work necessary for this to have been submitted in the first place. Seeing their comment that the AST system could be brought up to speed in 1-3 months after telling their CLC that it would take six months adds concern that this project is being rushed and proper care is not taking place. Changing the outflow location doesn't really change the concern of ice scouring that caused their first option to fail.

From a purely environmental side of things, having effluent that is worse than what is going into Boat Harbour and pumping that into the prime breeding grounds of the Northumberland Strait seems completely ill-fated considering what the current process has done to Boat Harbour. At least with Boat Harbour, most of the damage was contained to the receiving basin, Boat Harbour and the shoreline.

From a legacy point of view, look at what the legacy of the decision to strip Boat Harbour away from the Pictou Landings First Nations has created. It's one of the worst cases of environmental racism this country has seen. Pumping this effluent into the Strait has the very real potential of poisoning our water and our food. I know not being able to prevent the disaster that became Boat Harbour weighed heavily on the PLFN. I can't imagine what making a similar decision with the potential for similar consequences on behalf of everyone would be the legacy I'd want to leave to our children.

From a point of having faith in the people running the mill, I don't understand how they could have a new Industrial Approval approved. About a dozen infractions, ministerial orders and pipe leaks. At some point they should be held accountable for not meeting the terms of their approval or what is the point of issuing terms with an approval?

If the decision is being weighed as a protector of jobs or from a purely economical stance, there's more at risk with harming our fishing industry. If that pipe goes in, we're likely locked into the ramifications of living with a bad decision if things don't go well for the next 50 years with a pulp mill that will be over 100 years old.

There really hasn't been an effort made to come to a reasonable agreement with the Fishers or the First Nations. Throughout the process it has been Northern Pulp dictating what they want to do with their tag line 'no pipe = no mill'. That really causes concern in that it wouldn't be surprising if instead of trying to come up with a plan that works, this process feels like it was 'this is the plan', now how do we dress it up to look like it works.

Northern Pulp have stated that they require an extension on their use of Boat Harbour. As outlined early on in this, they've had over five years and chose initially to take other actions instead of getting the ball rolling. This latest ask for more time is far from being their first ask. The mill has been failing since they took it over and we've been hearing the phrase 'we need more time, just give us a chance' since the beginning of their ownership. The mill was designed to last 25 years and was 40 years old. According to Lana Payne from Unifor, the concessions made in their contract were to allow the owners to renovate the mill because proper upkeep hadn't gone on in 40 years. If the decision were made to okay this new ETF, when would the province be buying a new mill because it feels like we're putting brand new tires on a car that won't last the week.

Please see the EA submission as the large incomplete document that it is. At the very least, the immense size of this project, the material put forth, the potential risk to the environment and the large amount of concern that people have for the risk to their health, the environment and their livelihoods, if this EA submission isn't rejected, it definitely warrants a focus report (environmental assessment report).

Thanks for taking the time to read this. Making a decision on this, even if the choice is clear, is not an easy task.

(1) <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-mill-shut-down-due-to-effluent-leak-1.2670721>

(2) <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-air-emission-tests-fails-again-1.4295686>

(3) <https://globalnews.ca/news/2131146/pictou-harbour-shipwreck-could-be-over-120-years-old-diver/>

(4) <https://www.cbc.ca/news/canada/nova-scotia/proposed-northern-pulp-pipe-route-ocean-problems-1.4733101>

(5) <https://www.thechronicleherald.ca/news/regional/northern-pulp-scrambles-to-clean-up-effluent-spill-252239/>

(6) <http://www.paperexcellence.com/news/opening-remarks-northern-pulp-ea-submission-press-conference>

(7) <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-proposal-boat-harbour-waste-water-facility-1.4270995>

(8) <https://novascotia.ca/nse/ea/faqs.asp>

(9) <https://www.theguardian.pe.ca/news/local/paper-excellence-quells-rumours-protests-are-causing-company-that-owns-northern-pulp-to-pull-out-of-pictou-county-226139/>

(10) <https://www.youtube.com/watch?v=rHqSqZF0OYM&feature=youtu.be>

- (11) <https://www.northernpulpfuture.ca>
- (12) <https://www.change.org/p/minister-environment-of-nova-scotia-save-the-northumberland-strait-protect-our-atlantic-salmon-and-sea-trout/u/22909966>
- (13) <http://fishing-app.gpsnauticalcharts.com/i-boating-fishing-web-app/fishing-marine-charts-navigation.html?title=Northumberland+Strait+boating+app#12.29/45.7433/-62.6335>
- (14) <https://www.canada.ca/en/news/archive/2008/05/federal-government-improves-caribou-nova-scotia-ferry-terminal.html>
- (15) https://www.princeedwardisland.ca/sites/default/files/publications/cle_vol4.pdf?fbclid=IwAR3wj2twWKWHLzW8M6tr5AfucodL5eQ3y6Ynskj881fMu8rBljgEIX0T1q4
- (16) <https://www.cbc.ca/news/canada/nova-scotia/auditor-general-environment-approvals-1.4381562>
- (17) <https://globalnews.ca/news/1830438/timeline-canadas-2003-mad-cow-disease-crisis/>
- (18) <https://tourismns.ca/2017-record-year-tourism-nova-scotia>
- (A) <https://www.halifaxexaminer.ca/province-house/dalhousie-researcher-breaks-silence-over-pulp-mills-cancer-causing-air-emissions/?fbclid=IwAR0GdA9CCoyPkhKulsOk2IUOBUE-h-NX-NzR-GN1RX3L3glUonzcA2emCIA#Boat%20Harbour%20could%20be%20adding%20to%20the%20problem>
- (20) <https://www.cbc.ca/news/canada/nova-scotia/consultations-mi-kmaq-financing-northern-pulp-effluent-plant-1.4931101>
- (21) <https://www.rcaanc-cirnac.gc.ca/eng/1100100028589/1539608999656>
- (B) http://docs.wixstatic.com/ugd/7a1cbf_5006cfe89b9a41b79ed44ed39a5960b3.pdf

* There is no 19 footnote. A and B were added as I was working out of sequence at times out of this and I'm too tired to go back and try to rearrange the numbers. (-:

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Replacement Effluent Treatment Facility
Date: March 8, 2019 8:22:31 PM
Attachments: [NS Environment letter.docx](#)

March 8, 2019

Hon. Margaret Miller
Minister of the Environment
Government of Nova Scotia

Via email: EA@novascotia.ca

Re: Northern Pulp's Replacement Effluent Treatment Facility

Dear Madam Minister:

I am a resident of Pictou County on land that borders on the eastern end of Caribou Harbour. My family and I regularly walk and swim at the beach that is part of the Caribou Provincial Park. We bird watch on Munroe's Island. We regularly kayak and sail the waters of Caribou Harbour. I have accompanied fishers as they pull lobster traps off of Caribou Point and hunt for herring off of Pictou Island.

I am also a Professor of Fine Art at York University in Toronto and a professional artist. I have produced several works based on my research and experience of Caribou Harbour. These can be found at the following web addresses: <http://memoryfactory.sitemedia.ca> and <http://www.cariboumottos.ca>

I am writing in response to Northern Pulp's submission of its plan for a replacement effluent treatment facility and the proposal to place an effluent pipe not far off of Caribou Point into the waters of the Northumberland Strait.

Caribou Harbour is a unique estuarial environment that has been a source of food and therefore human culture for hundreds, if not thousands of years. It is a significant part of Pictou County's Northumberland Coast, its history and cultural identity. It is also a highly changeable body of water subject to tides, ice, fierce storm surges and fluctuating temperatures. Caribou Harbour is shallow and prone to silting to the degree that access to fishing wharves requires occasional dredging.

Our website www.memoryfactory.ca referenced above is dedicated to local memories of the Maritime Packer's plant at the east end of Caribou Harbour, adjacent to the Little Entrance, a channel through the isthmus between the mainland and Munroe's Island. The Little Entrance provided a safe harbour and immediate access to the rich fishing grounds between Caribou and Pictou Island. Maritime Packers for many years was the largest lobster processing plant in the area, some say the world.

In the mid 1980's the Little Entrance started to silt up permanently. Some say this was due to dredging the channel for the PEI ferry. Whatever the case, the Little Entrance completely silted over and the flow of water in Caribou Harbour completely changed. It is now much shallower and the bottom changes due to tides, storms and ice. The beach at Caribou Provincial Park can be sandy one year and rocky the next, the bottom of Caribou Harbour shifts over each winter. Concrete blocks as big and heavy as an automobile used as barriers to erosion can be tossed like skittles by storm surges. The point is Caribou Harbour is an ever-shifting, highly sensitive environment that is rich in life. Lobster, herring, crab, oysters and other species are abundant. Fishing has shaped the history and the culture of this particular spot.

In Northern Pulp's proposal for a new effluent treatment facility I have found no mention of the impact of one tonne of solids to be released daily into waters at the entrance to Caribou Harbour. In section 7.4.1 of Northern Pulp's registration document prepared by Dillon Consulting, there is no mention of a survey of Caribou Harbour or any studies of how water flows in and out of the harbour. The effect of the introduction of a massive infusion of water estimated to be over 62,000 cubic meters on a daily basis combined with a tonne of semi solid material has not been mentioned let alone analysed in terms of its impact on the harbour itself. Instead, Table E1.1-1 the claim is made that there will be No Significant Residual Environmental Effect Predicted. To anyone who witnesses the way Caribou Harbour subtly changes almost on a daily basis this seems to be an audacious claim. Caribou Harbour is a living entity and as such will be affected by the introduction of an effluent pipe.

I believe that Northern Pulp's Environmental Assessment regarding the issue of Caribou Harbour's Physical Environment, Water Quality and Sediment Quality is inadequate. I strongly recommend that your Ministry order an Environmental Assessment Report on this entire proposed project.

I also have very strong concerns about the location of the outlet for this pipe and its potential effect on the fisheries in area 26A. Figure 6.3-1 of the Executive Summary prepared by Dillon Consulting purports to represent the fishing done in the vicinity of Caribou Harbour, yet there is no indication of the herring fishery or the fact that the area around the north side of Pictou Island is an important herring spawning ground. Personally, I have seen herring swarming in Caribou Harbour to its most easterly extent up to the wharf operated by the Little Entrance Fishermen's Association. Again, I find the data presented in Northern Pulp's Environmental Assessment Registration Document raises more questions than answers. Given the significance of the fishery in Caribou Harbour, I feel that the Precautionary Principle that guides consideration of the environmental impact of an effluent pipe into the area of Caribou Harbour should preclude any potential threat to the rich aquatic life that spawns in these shallow waters. Caribou Harbour should be a protected estuarial zone and in no way should it be considered an appropriate location for an outlet for industrial effluent.

I would also like to ask the question: What significance is given to the cultural and historical aspect of Caribou Harbour? What consideration is there for the fact that generations of families living in the area consider Caribou Harbour a sanctuary for wildlife, a safe harbour for swimming, kayaking and sailing? It is the location of the Monroe's Island wildlife reserve, the Caribou Provincial Park and the Pictou Lodge, which has been in operation since 1927. The area has long been identified as a major area for outdoor recreation. Pictou County is defined by the generations of families who have earned their living from fishing lobster and other species in the immediate vicinity of Caribou Harbour. Within the communal rights of people living in the area to the peaceful enjoyment of nature and the established right of fishers to work in the area, the designation of Caribou Harbour as a location for an outlet of industrial waste seems to afford Northern Pulp a disproportionate right to the use of the waters of Caribou Harbour. This access threatens other citizens with the potential for an environmental disaster, the loss of livelihood and the loss of a unique habitat.

Fifty years ago, the proposal to put an effluent pipe from the Northern Pulp mill into the waters of Caribou Harbour where Maritime Packers was the largest employer in the county would certainly be met with disbelief and resistance. Is it surprising that disbelief and resistance is the response to such a proposal today? The reason remains the same: Caribou Harbour is too sensitive, too changeable, and too culturally important as a source of enjoyment and delight to be used as a sewer. With the fish stocks of Eastern Canada under threat and with the significance of Caribou Harbour to the tourist industry of the area this important marine environment should be afforded every protection from any source of pollution. I urge your Ministry not to approve Northern Pulp's proposal to install an effluent pipe into Caribou Harbour.

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: NP Effluent treatment plan
Date: March 8, 2019 8:53:03 PM

Dear Minister,

I implore you to reject Northern Pulp's effluent treatment replacement proposal on the grounds that it will cause serious adverse effects to the environment.

My name is _____ and I've lived in Pictou essentially my whole life excluding getting my education degree in NL. I hope to remain here.

I've never been a fan of the mill, especially when the wind is blowing a certain direction, but the economic benefits have always been impressed on me by others. Those no longer find merit with me. The environment has always lost against economic concerns. But I think the industry of the fishermen is equally as important as mill jobs. Tourism jobs as well. Also, I'd like to continue to enjoy my Caribou Island swims. That would end with the waste being dumped in the strait. Not to mention the environmental racism that has persisted for years here. Time's up for that.

Minister, it's 2019. The mill is well past it's intended lifespan. Let's innovate and re-train the mill workers. The treatment plan is dangerous and awful, this is your chance to be on the right side of history.

Sincerely.

Sent from my iPhone

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 9:10:38 PM

Project: replacement_effluent_treatment_facility_project Comments: In regards to the effluent pipe being proposed. I was really looking forward to visiting and swimming in the Northumberland Strait for the first time, its quite unfortunate that this would be even considered. There is such a lack of empathy for people living in this area and the effects on their health. Ignoring the high rates of cancer hurts any opportunity for developing any other sort of economy, limiting Nova Scotias opportunities in the future and making the inevitable clean up more costly which the taxpayer will end up paying. To summarize I am against this proposal. Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 60 y: 17

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Replacement Effluent Treatment Facility Project
Date: March 8, 2019 9:31:08 PM
Attachments: [NP Effluent Proposal EA](#) [.doc](#)

Hon. Margaret Miller
Minister of Environment

Please find attached my submission to this environmental assessment.

Sincerely,

March 8, 2019

Hon. Margaret Miller
Minister of Environment
Nova Scotia Environment
PO Box 442
Halifax, NS B3J 2P8

Submitted via email ea@novascotia.ca

Dear Minister Miller,

I am writing to you with respect to the **Northern Pulp Replacement Effluent Treatment Facility Proposal**.

I live along the Northumberland Strait coast on Route 6, known popularly as the Sunrise Trail extending from Amherst to Pictou. Since emigrating from Scotland and landing in Pictou in the late 1700s, the Ferguson family has called the North Shore home.

I am very concerned about the future of the Northumberland Strait and the communities along its shores. I am requesting you reject the project proposal from Northern Pulp on the following grounds:

1. Adverse impact on commercial fisheries

Northern Pulp's proposal lacks important data on the risk to the fisheries making its claims that harm is "not likely" not credible.

I have family, friends and neighbours who depend economically on the commercial fisheries in the Northumberland Strait, notably lobsters and shellfish.

The Malagash Oyster has a flavour second to none. It is indigenous to the Malagash Harbour, once gathered by native Mi'kmaq and later by European settlers. This is a well established and reproducing oyster region. Bay Enterprises, operated by my neighbours the Purdy family, have been producing oysters since 1867. Today they use traditional and modern methods to sustainably farm oysters and quahogs, enjoying an international reputation.

Each oyster growing region in Nova Scotia possesses its own unique marine environment, including variations in salinity, temperature, tidal shifts, and mineral/chemical composition. This in turn, leads to the oysters of each area expressing different characteristics in shell shape, and, more importantly, in taste. Anything that alters or destroys this rare environment is putting this oyster at risk. Malagash Oysters are unique. To protect these delicious indigenous oysters we must protect their habitat from contamination.

Caribou Harbour, the proposed receiving site for the effluent pipe, is a critically important fishing and spawning ground for lobster, rock crab, herring, ground fish, and many other species. Damage to that habitat will have an adverse impact on communities throughout the Strait region.

2. Adverse impacts on human health

The Northern Pulp treatment system proposal includes a plan to burn the waste sludge. The waste sludge contains toxins which would be released through the stacks of the mill's power boiler. The proposal is to "dewater the sludge prior to mixing it with bark and other wood waste for combustion in the mill's power boiler."

This is the same power boiler that is currently and repeatedly failing stack emissions tests. Problems with air quality from mill emissions have been documented for years. Adding sludge containing toxins to the combustion mix increases the health risks from the mill's air emissions.

I don't have to go to Pictou to experience the air emissions from Northern Pulp. These emissions, depending on the winds, find their way to the trails I like to hike, the beaches I enjoy and the homes of friends I like to visit.

Airborne emissions of the mill are a significant health concern to me and I can find no evidence that Northern Pulp's proposal mitigates those pollutants.

3. Adverse impacts on the environment

The proposed treatment system runs the risk of harming the growing tourism industry along the North Shore which promotes the area's warm, clean water and world class sandy beaches.

Visitors are attracted to the North Shore by the many opportunities to enjoy the natural world, to consume high quality local food and beverage products, and experience small town life. Many of the thriving new businesses market these experiences.

Northern Pulp is already threatening the eco-tourism experience offered by these North Shore businesses. According to Deputy Minister of Environment, Frances Martin, your Department has taken 12 enforcement actions against Northern Pulp since 2012.¹

With such a poor track record, how are we to have confidence in the claims from Northern Pulp that there will be no residual damage, by accident or design?

Moreover, monetary compensation is not meaningful mitigation for the destruction of natural ecosystems and their inhabitants.

In conclusion, with so much at risk, I urge you to honour the precautionary principle and reject this effluent treatment facility proposal.

Sincerely,

@gmail.com

¹ Hansard, Nova Scotia Public Accounts Committee, February 14, 2018, Page 10. Accessed at https://nslegislature.ca/sites/default/files/pdfs/committees/pa/pa_20180214.pdf

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 9:47:06 PM

Project: replacement_effluent_treatment_facility_project Comments: My submission is 8 pages and contained via this sharable link

https://docs.google.com/document/d/1_8Y75LF30qtK8t9r_6AXynb4ZPT-SND-V5CQ9YQIq9s/edit Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 69 y: 20

New Glasgow Nova Scotia

I would like to first present some background before my submission. I am a proud of the late _____, from the 1930s to the 1950s, was a Master Mechanic and efficiency genius in the employment of Maritime Steel and Foundries Limited, P&H heavy equipment of Milwaukee, Wisconsin, USA and the United States Department of War during the latter part of World War 2. His innovations included the design of the mechanics of the Canso Strait Canal Locks, the design of Structural Lattice for the Canso Causeway Swing Bridge. _____, and I have generally inherited our quest to how things work and what are the most efficient practices in processes.

In the age of Internet research the abilities to find scholarly articles on subjects are indeed vast and instant on ones desktop. Choosing between truthful content or false leading information, to an ultimate political agenda, is not difficult.

_____, was a highly respected journalist for _____ and his teaching to us was to critically think and examine with an open mind. Everyone has Bias however there are sources that are honest and accurate. Tone and language used to communicate their given thesis or pronouncements is always the great indicator.

Before the Proposal for the Effluent Treatment facility for the Abercrombie Mill the Antigonish Town and County Library in their quest to have the ultimate in energy efficient computing.¹ A relatively unknown technology company named _____ was what I found, recommended and sold to the Library. The task to find the solution was certainly not a simple one, considering the vast options in computing. I found _____, via the Internet, the _____ solution was a preferred computing option for the United Nations² Boeing and Nasa among many large and small private or public groups across the world.

With my Discovery _____, I am happy to say in a recent visit to the Antigonish Town and County Library I found the _____ system running as good as the day it was commissioned in 2011. This Install is the only one that I know in the world where all the computing stations of a public library work off PV Solar panels or batteries charged via PV solar panels. Thirty (30) _____ sharing the computing capacity of Two CPU Servers saving 95 percent of the electrical power normally used in multiple seat computing setting.

My references for judgement of BAT or Best Available Technology have always been from well sourced information from Business and Governmental bodies. Procurement practices described in the forms of Press Releases, Trade Journals, Case Studies, White Papers and Scholarly articles are key to knowledge of technological and environmental subjects.

¹ "Case Study: Antigonish Town & County Library - Efficiency Nova Scotia." <https://www.encyclynova.ca/smart-energy-business-idea/case-study-antigonish-town-county-library/>. Accessed 5 Mar. 2019.

² "NComputing and UN to Bring 500000 Workstations to ... - Litmos." 27 May. 2009, <https://www.litmos.com/blog/industry-news/ncomputing-and-un-to-bring-500000-workstations-to-developing-countries>. Accessed 5 Mar. 2019.

Public or Private sector procurement behavior generally occurs for salient well researched judgements for purchasing. Published documents with a price tag have much greater evidence value than that of Free opinion on the Internet.

On my extensive research of the proponents proposal. Veolia Anox Kaldnes BAS MBBR - Moving Bed Biofilm Reactor system

In my researched judgement the choice of the Veolia Anox Kaldnes BAS Moving Bed Biofilm Reactor system by the proponents ,Dillion Consultants and Northern Pulp, is indeed the Best Available Technology or BAT for treating Northern Bleached Softwood Kraft Pulp Effluent. The Anox Kaldnes BAS MBBR system has over 700 reference installations across public and private effluent treatment facilities. Over 700 multi-million dollar installations in the timespan of 30 years is an incredible amount of sales growth especially in the realm of Public Sector Procurement with municipal waste treatment facilities. If indeed Anox Kaldnes BAS MBBR did not work, as has been promoted, it would indeed not had grown to hundreds of installations approaching 1000 installations in a relative short time of 30 years. Simple Logic and a bit of knowledge of the nature of public and private procurement patterns tells me that sales of MBBR Systems are in the Multi Millions or even Billions of dollars since 1989.

As great footnotes I have seen online where Veolia Anox Kaldnes BAS is the sewage treatment system for Pictou Landing First Nations.³ A First Nation that I can confirm via MERC tender documents as using the Veolia Anox Kaldnes BAS Moving Bed Biofilm Reactor system is the God's Lake First Nation in the province of Manitoba⁴ Also Notable is the Town of Ladysmith British Columbia installing a Veolia Anox Kaldnes BAS Moving Bed Biofilm Reactor system in 2018 with Federal infrastructure monies. The Following is part of the notated # 4 article on that system in an ecologically contained seawater environment in which Shell Fishing is an industry of the Area. "The harbour is of great importance to us and it's a shellfish harvesting area," said director of infrastructure services, Geoff Goodall. "It's always been one of our top priorities to ensure that whatever we are doing provided the best effluent quality possible."⁵

According to the Proponents EA documents the Pulp and Paper Industry has 40 MBBR systems installed to date with Swedish pulp and paper mills being 25 percent of the purchasers. In my research of other energy efficiency and ecological positive innovations, I have found Sweden to be one of the most progressive for developing or adopting world leading technologies in the Environment and Energy Efficiency arenas. Sweden's reputation is world renowned in environmentalism .

³ "First Nations wastewater treatment systems in Canada: Challenges" 12 Apr. 2018, <https://www.tandfonline.com/doi/full/10.1080/23311843.2018.1458526>. Accessed 5 Mar. 2019.

⁴ "GOD'S LAKE FIRST NATION - Sewage Treatment Plant and ... - MERX." 23 Jan. 2013, http://www.merx.com/English/SUPPLIER_Menu.Asp?WCE=Show&TAB=1&PORTAL=MERX&State=7&id=260643&print=Y&src=osr&ForceLID=&HID=&hcode=jN2ttSK03W%2BMu2oHX3mq5Q%3D%3D. Accessed 7 Mar. 2019.

⁵ "PHOTOS: Ladysmith's wastewater treatment plant honoured for" 13 Apr. 2018, <https://www.ladysmithchronicle.com/news/photos-ladysmiths-wastewater-treatment-plan-honoured-for-engineering-excellence/>. Accessed 5 Mar. 2019.

The Business and Governmental culture in Sweden seems to be forward thinking risk taking with great amounts of research before execution of new technologies. A prime example recent interest of mine, in which Sweden is a leading adopter, is that of R744 or Co2 Transcritical Refrigeration systems for Ice Recreational Facilities. Sweden and Quebec are the largest install territories for R744 in Ice Arenas in the World. Over the last four years I have personally compiled one of the world's most extensive R744 spreadsheets of refrigeration in Ice Facilities thanks in part to global R744 refrigeration experts in Stockholm, Sweden.^{6 7} The Quest that lead to the CO2 ice rink discovery was a Google Search for Energy efficiency in Ice Rinks in which I found the Natural Resources Canada Comparative Study of Ice Rink Refrigeration.⁸

The Original MBBR system was piloted in Norway in 1989 for a municipal effluent treatment system. The first pulp mill installation of the Anox Kaldnes MBBR was in Norway with a 1700 m3 system for Sande Paper in 1993. The Swedish Pulp and Paper Industry was soon to follow with a Pulp Mill Pilot project for Sweden was in 1994 for the Stora Papyrus Grycksbo Mill. Capacity of that system was 560 m3 and the results were detailed in the 49th Purdue University Industrial Waste Conference in 1994⁹. [Purdue Study](#)

Of the 40 MBBR Pulp Effluent treatment systems I have found 34 are located in the European Union and these MBBS Treatment systems seem to function to exacting standards of the European Union in Climatic Zones ranging from Spain to Scandinavia. A Recent discovery, I made of a new MBBR installation in Spain, found that the European Union had partially funded the system as a Best Available Technology option. Northern Pulp's proposal of 6000 m3 of MBBR to me is very sound in light of the European Union funding of MBBR in their member countries.¹⁰ I also base my judgement on the fact that the Proponents proposed capacity of MBBR is indeed not the largest in existence in the Pulp Industry, Papelera Sniace in Spain with a reactor volume of 10690 m3 is. Papelera Sniace's MBBR was installed in 2010 and one would assume it has been highly successful considering two more MBBR s have been installed for the Spanish Pulp and Paper industry. My compiled list of MBBRs in pulp mill operations Note the Swedish Pulp industry has installed MBBR systems for close to twenty years [MBBR Spreadsheet Created](#)

⁶ "(PDF) Carbon dioxide in ice rink refrigeration - ResearchGate."
https://www.researchgate.net/publication/287392551_Carbon_dioxide_in_ice_rink_refrigeration. Accessed 5 Mar. 2019.

⁷ "EKA responds to Winter Olympics HFC ice-rink use - R744.com."
http://www.r744.com/articles/8131/eka_responds_to_winter_olympics_hfc_ice_rink_use. Accessed 6 Mar. 2019.

⁸ "Comparative Study of Refrigeration Systems for Ice Rinks."
https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/comparative-study-arenas_EN.pdf. Accessed 8 Mar. 2019.

⁹ "Proceedings of the 49th Industrial Waste Conference Purdue" 29 Dec. 1994,
https://books.google.com/books/about/Proceedings_of_the_49th_Industrial_Waste.html?id=efuyjycMAZwC.

¹⁰ "Veolia chosen for the extension of the wastewater treatment plant at"
<https://www.veoliawatertechnologies.com/en/press-releases/veolia-chosen-extension-wastewater-treatment-plant-munksjo-s-tolosa-mill-spain>. Accessed 5 Mar. 2019.

Elemental Chlorine Free Vs Total Chlorine Free Bleaching

In Regards to the former owners of the Abercrombie Mill and the Switch to Elemental Chlorine Free Bleaching. Elemental Chlorine Free Bleaching with Chlorine Dioxide has turned out to be the winner of the ECF vs Total Chlorine Free debate . My research has found that since the year 2000 Total Chlorine Free Pulp Mills have been either A) gone out of Business like the Louisiana Pacific Mill in Samoa, California¹¹ B). TCF Mills been converted to make limited tonnage runs on a separate TCF lines parallel to a new ECF line like the Mercer Mills in Germany or C. Total abandonment of TCF to be replaced by ECF Bleaching like was the case with the Metsä Fibre Rauma mill TCF Mill in Finland. The Metsä Fibre Rauma Mill is a very notable TCF installation as it was the First New construction dedicated TCF mill in the world. Matsa Fibre Rauma was commissioned in 1996 and that Mill did not run the normal course of an investment return of decades ,in my limited observation, as the same mill was turned into a ECF mill in 2007. ¹²

No new TCF Mills have been constructed in the Northern Hemisphere that I am aware of in the new millennium or a full 18 years and the reason seems to be clear. In a 2002 press release by the British Columbia Ministry of Water, Land and Air Protection ,the Honorable MP for Vancouver Quadra, Joyce Murray overturned a previous governments impending ZERO AOX law for Pulp mills in British Columbia. A scientific panel had found no appreciable differences in Effluent qualities from TCF VS EDF Pulp Mills¹³ . There are three Pulp Mills in Europe that the proponents, Northern Pulp and Dillion Consultants, are patterning their effluent treatment plans from according to their submission. Here is an example of the European Market conditions as of 2017 from one of them. ¹⁴ Quote “ **Although strong positions for TCF still remain in the German speaking region of Europe, some 95% of our European customers now use ECF pulps and this is basically us adapting to current market conditions. “** Marcus Hellberg , Head of Business Development and Marketing , Sodra Cell

Effluent Treatment systems for NSBK Pulp Northern Pulp is emulating with this Project

The Mercer International Stendal ECF / TCF Mill in Arneburg, Germany¹⁵

The Södra Cell Värö ECF/ TCF mill in Väröbacka, Sweden ¹⁶

The Södra cell Mörrum Paper and Dissolving Pulp Mill, Sweden

The addition of oxygen delignification at Abercrombie Point Mill is a basic element that all TCF / Hydrogen Peroxide mills require. Oxygen Delignification, from my investigations, has been a replacement Delignification process for TCF Bleaching which was once an Ozone Delignification process. The addition of Oxygen Delignification to the EA , in my opinion, is

¹¹ "Site Profile - Samoa Pulp Mill - EPA OSC Response."

https://response.epa.gov/site/site_profile.aspx?site_id=8891. Accessed 5 Mar. 2019.

¹² "Metsä Fibre's Rauma pulp mill: ECF bleached softwood pulp production."

<https://www.metsafibre.com/en/about-us/Pages/Rauma-mill.aspx>. Accessed 5 Mar. 2019.

¹³ "NEW AOX STANDARD WILL PROTECT ENVIRONMENT, JOBS." 5 Jul. 2002,

<https://archive.news.gov.bc.ca/releases/archive/2001-2005/2002wlap0127-000522.htm>. Accessed 8 Mar. 2019.

¹⁴ "Investments mean more ECF pulp from Södra - Tissue World Magazine."

<http://www.tissueworldmagazine.com/latest-headlines/investments-mean-more-ecf-pulp-from-sodra/>. Accessed 5 Mar. 2019.

¹⁵ "Kraftzellstoff - Mercer Stendal."

<https://www.zellstoff-stendal.de/de/produkte-ressourcen/produkte/kraftzellstoff.html>. Accessed 5 Mar. 2019.

¹⁶ "Investments mean more ECF pulp from Södra - Tissue World Magazine."

<http://www.tissueworldmagazine.com/latest-headlines/investments-mean-more-ecf-pulp-from-sodra/>. Accessed 5 Mar. 2019.

a very forward thinking choice not only from a business potential standpoint but also from cost of production and ecological standpoints. On face value Oxygen Delignification added to the Bleaching process will indeed allow fewer chemicals to be used to produce quality Kraft Pulp via elemental chlorine free bleaching. If Global Market conditions have Total Chlorine Free Pulp become a profitable commodity then Northern Pulp may have than option. The Actions and Business course of Scandinavian Pulp Producers Metsa and Sodra however point to **Total Chlorine Free Pulp Bleaching as a Sunset industry** with decreasing Kraft Pulp Market share restricted 5 percent of the Global Market. ¹⁷

Cooling Tower refrigeration - Natural Refrigerants VS HFC

In my recently acquired knowledge of Natural Refrigerants in Ice Rinks I found troubling information on HFC refrigerants recently. Trifluoroacetic Acid has presented some elevated Aquatic Toxicity in Beijing China according to studies¹⁸. HFC refrigerants are easy to avoid by choosing a Natural Refrigerants which the proponents have indeed done. I inquired to the Proponent the Refrigerant to be used in the Water Cooling System for the Effluent Discharge plant. Cooling will be done with the Natural Refrigerant R718 AKA H2O or Water. HFC refrigerants also present the problem of high Greenhouse Gas Potentials of 1450 molecules of CO2 per molecule of HFC Refrigerants being typical¹⁹. NH4 Aka Ammonia has a GHG potential of Zero and CO2 has a GHG potential of ONE. ²⁰ I have fullest confidence in Northern Pulps Effluent Treatment proposal will lessen impacts on the the Environment and also human health effects by just these few forward thinking choices I have discovered via the EA . The bypassing of HFC refrigerants for the water cooling to a Natural Refrigerant is very forward thinking on Northern Pulp's Part.

Effluent Temperatures for Mixing zone offshore in Northumberland Strait

Concerns expressed by some stakeholders about effluent temperatures coming out of the Diffusers are probably very moot considering the pathway the pipe will take including 4 kms underwater in the last stage. Water Cooling of the Cooling Towers seems very plausible to have temperatures return to background levels within the 100 meter mixing zone. ²¹ MY personal discoveries and knowledge of Heat Recovery, in regards to Ice Rink systems, I have seen the transfer of recovery heat from an Ice complex is limited to 1000 metres away via Heavily Installed Pipe that is typically 12 inches in total diameter.

The proponents 36 inch Diameter **Un-insulated** HDPC pipe, running through 4 kilometers of seawater to the final diffuser outlets is very likely to lose a great deal of the original Effluent Plant Heat. Coupling the Aquatic Marine distance that the pipe will travel with the transfer

¹⁷ "Best Available Techniques (BAT) - The European IPPC Bureau." 30 Sep. 2014, http://eippcb.jrc.ec.europa.eu/reference/BREF/PP_revised_BREF_2015.pdf. Accessed 6 Mar. 2019.

¹⁸ "Airborne trifluoroacetic acid and its fraction from the degradation of" 17 Mar. 2014, <https://www.ncbi.nlm.nih.gov/pubmed/24628386>. Accessed 5 Mar. 2019.

¹⁹ "Hydrofluorocarbons (HFC) | Climate & Clean Air Coalition." <http://www.ccacoalition.org/fr/slcp/hydrofluorocarbons-hfc>. Accessed 5 Mar. 2019.

²⁰ "Global warming potentials - Canada.ca." 18 Feb. 2019, <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/quantification-guidance/global-warming-potentials.html>. Accessed 5 Mar. 2019.

²¹ "Water as a refrigerant – sustainable and clean | efficient energy." <https://efficient-energy.de/en/the-most-efficient-chiller/water-as-a-refrigerant/>. Accessed 6 Mar. 2019.

over approximately 800 metres across the Northern Pulp property to the Harvey Veniot Causeway, the elevated transfer above the Middle River spillway gates on the Harvey Veniot Causeway (with airborne exposure of the 36 inch pipe) being 30 metres in length, the 1.561 metres transit of the 36 inch Effluent pipe from the Pictou West River control gates to the Pictou Town end of the Harvey Veniot Causeway would probably have a good amount of thermal loss of the Treated Effluent inside the pipe. The Distance from the Pictou Town end of the Causeway to the Rotary is about 1300 metres . From the Pictou Rotary to Caribou Harbour is over 7300 metres in Length. My casual researched observations of heat loss from District Heating Systems, with highly insulated pipe that are not made of HDPC, leads me to believe that claims by the proponents are made with high levels of validity.

The proponents have exhibited a historical pattern of using BAT or Best in Technology that in at least one case have exceeded my expectations.

2014-2015 Precipitator Replacement - An example of the Proponents wise forward choices.

One only has to examine the results of the 2014/ 2015 replacement of the Abercrombie Mills Precipitator where prior to the 2014 precipitator failure the releases of PM 2.5 were 1,291 tonnes of PM 2.5 annually were recorded in 2014 via the Federal Department of Environment and Climate Change . The result according to the Canadian Federal Department of Environment and Climate is the installation of the new precipitator has resulted in a reduction of PM2.5 to 1.6 Tonnes in 2017. ²²

[Northern Pulp 2017 report](#)

A decline in PM 2.5, on an annual basis from 2014 of 1,291 tonnes in that year to 1.6 Tonnes of PM 2.5 admitted in all of 2017 is quite an improvement.

For the 2017 emissions of 0.125 percent of the 2014 total shows the proponent seems to have the best consulting and action plans to deal with environmental and public health challenges the operation of a NBSK Kraft Pulp Mill presents . Bellow, one page 7 is the recent history Table detailing the PM 2.5 emissions from the Abercrombie Mill .

²² "Pollution and waste management - Canada.ca." 1 Oct. 2018, <https://www.canada.ca/en/services/environment/pollution-waste-management.html>. Accessed 6 Mar. 2019

PM2.5 (NA - M10)

Year	On-Site Releases				Disposal ⁽¹⁾		Off-Site Recycling	Units
	Air	Water	Land	Total	On-Site	Off-Site ⁽²⁾		
2017	1.6	-	-	1.6	-	-	-	tonnes
2016	110	-	-	110	-	-	-	tonnes
2015	823	-	-	823	-	-	-	tonnes
2014	1,291	-	-	1,291	-	-	-	tonnes
2013	734	-	-	734	-	-	-	tonnes

In Conclusion

With simple research of the elements of Northern Pulp's Effluent Treatment Facility (ETF) I feel highly confident that the proposal will not harm the Marine ecology of the Northumberland Strait in any Tangible way. The Six Rounds of Environmental Effects Monitoring for all Pulp and Paper mills in Canada, since 1992, have shown the trend of aquatic ecologies improving in receiving bodies of water near Pulp and Paper Mills. A similar Paper Excellence Mill in Howe Sound British Columbia is over 100 years old and has had continuous Upgrades in Process including the addition of Oxygen Delignification into their kraft pulp production, Changing from Chlorine Gas Bleaching to Chlorine Dioxide Bleaching AKA Elemental Chlorine Free Bleaching among many upgrades the entire industry has taken. Where once Howe Sound was closed for commercial and sports fishing, partially because of effluent contents of the Howe Sound and Woodfibre mills and mining operations, today it is no longer the case. Quoted from one of Canada's newspapers of Record The Globe and Mail " The first glimmer of hope came in 1988 when Howe Sound Pulp and Paper began a \$1.3-billion renewal process at Port Mellon. The project would turn what was openly recognized as an environmental disaster into one of the most modern, cleanest pulp mills in the World " Mark Hume, Globe and Mail OCTOBER 21, 2013

“ Thou Paper Excellence is not the complete history of Howe Sound it is a much better history than the Mill prior to Paper Excellence.²³

No human activity is without impacts however the Proponents proposed ETF will be a vast improvement from Boat Harbour that will continue the huge progress made at the Abercrombie Mill over the last couple of decades. With the introduction of ECF Bleaching in 1997 the environmental impacts have clearly improved , as represented by the results of multiple year EEM studies. I am highly confident science and the history of Northern Pulps environmental investments will continue with the approval of this proposal. I first personally took notice when the Mill was converted from the use of Bunker C Oil to Natural Gas for proposes inside the plant.

Thank You Very Much

23 "Return of industry threatens renewal of Howe Sound's marine ecosystem." 21 Oct. 2013, <https://www.theglobeandmail.com/news/british-columbia/return-of-industry-threatens-renewal-of-howe-sounds-marine-ecosystem/article14952818/>. Accessed 8 Mar. 2019.

²³ "Return of industry threatens renewal of Howe Sound's marine ecosystem." 21 Oct. 2013, <https://www.theglobeandmail.com/news/british-columbia/return-of-industry-threatens-renewal-of-howe-sounds-marine-ecosystem/article14952818/>. Accessed 8 Mar. 2019.

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 10:09:04 PM

Project: replacement_effluent_treatment_facility_project Comments: I am writing in connection with the Environmental Assessment Registration Document hereafter "EA" submitted by Northern Pulp of the Replacement Effluent Treatment Facility. I have read carefully the document and its supporting documentation and am gravely concerned about many of the potential devastating impacts the proposal may have on the environment and, in particular, the Northumberland Strait ecosystem. As an initial point, I feel that the public consultation period of 30 days for a project of such complexity is woefully inadequate. The EA is thousands of pages in length, with multiple supporting documents, and covers a broad range of topics. For meaningful engagement to take place, considerable additional time should have been allowed. By way of background, I am a geoscientist, with a PhD in Geology from the University of New Brunswick, working primarily in the field of marine geoscience. My family have a cottage on Caribou Island and I have enjoyed many days of recreational boating and fishing in Caribou Harbour. As such, I am very familiar with the coastline, seabed and tidal conditions of the area of the proposed effluent outfall pipe. While I have reservations over many aspects of the project for example, the transport of the effluent through a pipeline that crosses above the water source for the Town of Pictou, I will restrict my comments here to those aspects of the EA that I have some familiarity with and specific scientific based concerns about. Specifically, these will focus on the proposal to pipe effluent to a discharge point close to Caribou Wharf. The environmental effects are dealt with in Chapter 8 of the EA with the harbour physical environment described in Section 8.11. The descriptions provided of the area around Caribou Harbour are very general relying on regional scale syntheses and existing reports that focus on existing data which in many cases are quite old see for metal concentrations in sediments on Table 8.11-1 from 1990. Any monitoring of the marine environment and assessment of the impacts particularly potential ongoing impacts should have a robust baseline dataset. The EA clearly does not have purposely acquired primary data and relies on inapplicable, insufficient or inappropriate datasets and studies. Physical Hazards Sedimentation " The Northumberland Strait coast of Nova Scotia is a dynamic marine coastal environment with longshore drift transporting and depositing sediments typically from West to East. This is particularly evident at the mouth of Caribou Harbour where a large sand bank occupies much of the western side of the mouth. This is clearly visible through satellite imagery for the area and is the cause for the requirement to dredge the navigation channel for the PEI ferry that departs from Caribou Wharf. The development of a significant sand bank on the lee side of Caribou Point is entirely expected where longshore drift is a dominant process and environments such as this are highly mobile sedimentary environments. This represents a burial danger for the diffusers which would impact the effectiveness of the assumed dilution of effluent in the water column. If the diffusers cease to work as designed, concentrations of effluent could exceed the CCME guidelines for Marine Aquatic Life causing fish kills. Furthermore, the process of monitoring the condition of the diffusers is greatly diminished if it becomes buried. The prospect of having to excavate sediments to ensure the diffusers function as designed risks damage and further degradation of the marine environment. This was not addressed in the EA. On a related point, the proposed effluent pipeline routing is along the western edge of the dredged navigation channel. This channel is dredged on a relatively frequent basis. The dredging operation typically takes the form of a large excavator on a barge " a rather imprecise procedure. The possibility of damage to the pipeline by dredging operations would seem quite high. Ice Keel - The Northumberland Strait is well known for

significant ice development and accumulation in the winter season. In a comprehensive study of ice keel data from the Northumberland Strait, Obert and Brown 2011 report average ice keel depths of 2.94 m with a maximum of 8.49 from the PEI bridge. The EA cites a NS Museum of Natural History report 1996 that states that "coastal lagoons in the Northumberland Strait area are protected from ice scour". The outfall for the effluent pipeline is located beyond the mouth of Caribou Harbour and therefore this statement would not seem to apply. Even the ice keels in the Caribou Harbour mouth region were significantly smaller than those noted above, it seems plausible that damage to the pipe could happen by ice keel scouring in the winter months.

Physical Oceanography The EA is deficient in describing the physical oceanography of the local environment. Assessments of salinity, temperature and tidal currents are based on measurements and models for the entire Northumberland Strait and southern Gulf of St Lawrence. For a project whose potential effects may have such a profound influence on the marine environment of such an enclosed bay and whose effects, in large part, are determined by physical oceanographic processes, there is a striking lack of detail and analysis. The understanding of tidal currents for the area is entirely insufficient. The EA cites modelling of tidal currents from DFO in Figure 8.11-3 which covers the entire Northumberland Strait without providing any additional context or information. The semi-enclosed nature of Caribou Harbour presents a localised complexity with understanding the tidal pattern in the region. This was not addressed in the EA. The degree to which tidal mixing occurs is not addressed in any detail. The Northumberland Strait has some of the lowest tidal mixing in the Gulf of St. Lawrence Lu et al., 2001. Coupled with the localised coastal geography, it is quite possible that the current/flow regime in the area of the proposed outfall is not conducive towards effectively diluting the effluent discharge. This brings me to the numerical modelling supplied in the EA Appendix E that purports to show that the effluent becomes rapidly diluted within the water column. The stated model parameters and results are quite simply not scientifically valid and cannot, in my view, be used to support any decision making by the regulator. If decisions are to be science-based then it is important that the science being presented is credible and broadly acceptable to the scientific community. Below is a non-exhaustive list of major problems with the proposed modelling results:

- The effluent concentrations are not described or defined. Different components e.g. dissolved solids, metals, organic material etc. will behave in a different manner in the water column and this was not accounted for.
- The modelling results indicate that there are few isolated traces of relatively high diluted effluent after a period of 30 days see pg 350 of the EA and figures 2.5 to 2.13 of Appendix E, but effluent discharge will be continuous. If a continuous flow is assumed, it is physically impossible for there to be an isolated concentration of the effluent away from the discharge location.
- The modelled ambient flow directions shown in Figure 3.1 of Appendix E show a dominant northwest direction flow. This is counter to local knowledge and the stated understanding cited in the EA itself: "The current in the Northumberland Strait generally flows in a southeasterly direction between New Brunswick and Prince Edward Island PEI Nova Scotia Museum of Natural History 1996." see pg 338 of the EA.
- The shape of the dispersal plume from the diffuser as shown in figures 3.4 and 3.5 of Appendix E is utterly unrealistic. This suggests a numerical weakness in the model that undermines any confidence in its output. The tidal modelling and contaminant plume dispersal model is scientifically not credible and should at a minimum be subjected to rigorous peer review. The Caribou-Munroe Island Provincial Park is located less than 2 km from the proposed outfall location and the proposed effluent pipe will be within 400 m of the Provincial Park. The website for this Park currently states "Caribou-Munroes Island Provincial Park invites you to experience northern Nova Scotia's unspoiled natural beauty. Conveniently located along the Sunrise Trail just a few kilometres from the Caribou-Wood Islands Ferry Terminal, the park features secluded, well-wooded sites that offer privacy in a natural

setting.â? <https://parks.novascotia.ca/content/caribou-munroes-island-hiking-trails> Is the current government planning on amending this description to include that the recreational activities are located immediately adjacent to an effluent outfall? Currently reviews for this park on Trip Advisor state that the beach is lovely, the wilderness is beautiful, however, it is stinky due to the Pulp Mill https://www.tripadvisor.ca/ShowUserReviews-g154977-d2306605-r140010740-Caribou_Munroes_Island_Provincial_Park-Pictou_Nova_Scotia.html.

Furthermore, it seems that without a permit from the Minister of Lands and Forestry the proposed effluent outfall should not be allowed. The effluent is, by definition, a hazardous or industrial waste. Section 24 of the Provincial Parks Act R.S., c. 367, s. 1 states: â?oNo person shall transport garbage, refuse or domestic, hazardous or industrial waste through, over or in any provincial park or deposit such material in or on a provincial park, except as may be authorized by permit issued by the Minister.â? The proposed location of the effluent outfall seems at odds with the purpose defined in Section 2 of the Provincial Parks Act. A source of contamination is not compatible with â?oproviding resident travellers and out-of-Province visitors with opportunities to discover, experience and enjoy Nova Scotias distinctive outdoor recreational and heritage resourcesâ? Section 2.1.d of the Provincial Parks Act. The Caribou-Monroes Island Provincial Park was not included as a Valued Component VC in the EA document. Given the proximity of the park to the outfall location, it should be included as a VC and have a full environmental effects assessment. Caribou Wharf is the home port of many fishers who make a living on the waters of the Northumberland Strait. Their knowledge and years of experience fishing these waters is unrivalled. Their near unanimous opposition to the proposed pipeline is telling and, in my view, should be heeded. To conclude, there is simply too much at stake to grant the approval of the project based on the EA submitted by Northern Pulp. In my view, the EA does not contain sufficient data or analysis of the marine environment in and around the region of the effluent outfall pipe. The EA has not taken into account the physical dangers to the pipe infrastructure and the potential behaviour and effect the effluent outfall will have on the marine environment. Name: _____ Email: _____

@gmail.com Address: _____

Privacy-Statement: agree

x: 64 y: 27

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 10:31:27 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Forestry and Fishing are very important sectors and have and can continue to co-exist side by side and mills plan will put them atop of pact in regards to the environment and meeting regulatory standards. Mill should be given the time to do put in their treatment plant as all Nova Scotians will benefit

Signed by:
@hotmail.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Please reject NP's replacement effluent treatment facility proposal
Date: March 8, 2019 10:59:37 PM

Hello,

I am writing to ask you to please reject Northern Pulp's effluent treatment replacement proposal on the grounds that it will cause adverse effects that significantly outweigh any potential benefits of allowing it.

If the proposal is approved, it will allow an aging facility to limp on for a few more years while posing serious potential risks to the Pictou area. If the proposal is rejected, it is likely that the mill will close. _____, director of communications for Paper Excellence has been quoted as saying "No pipe equals no mill" [1]. I believe this is the ideal outcome. Here are a couple reasons why:

1. The Pictou Landing First Nation people don't want it [2] - and for good reason. The existing effluent pipes have leaked several times in the past [3]. It's time to listen to them. The shameful history of environmental racism in Boat Harbour makes our whole province look bad and moving the effluent dump of an old pulp mill across land and out into beautiful waters full of sea life doesn't make it any better. It's time to get rid of the mill and put an end to that whole miserable saga.

2. Tourism. The pulp mill is a huge blight on an otherwise picturesque tourism destination in our province. Why approve an effluent pipe that is at best an environmentally risky means of allowing an outdated operation to limp on a few years longer? The loss of 300 jobs [4] is not nothing, but those people all have the potential to do other things. Tourism is one industry poised to improve if the mill closes. Real estate is another. The waterfront properties in Pictou Harbour would be worth more and the town of Pictou waterfront would be so much more enjoyable if it wasn't for the eye(and nose)sore that is the pulp mill. Pollution from the mill stinks. It stinks up the entire area surrounding Pictou Harbour. I visit my family in Pictou regularly and can attest to how bad it smells. Other people without family in town don't like to visit because it's so often smelly there. Even if the airborne pollution from the Mill had no negative impact beyond stinking and looking bad, the stink especially harms tourism (and quality of life in the Pictou area). The same would be true of the effluent that would be coming out of the pipe into the strait if the proposal is approved. There are several beaches within 2 km of the proposed pipe outlet [5], including Caribou-Munroes Island Provincial Park [6] and the beaches surrounding the Caribou Island Lighthouse [7]. Those beaches are great for swimming and watching the many curious seals and diving seabirds from, but people will think twice about swimming so close to effluent and worry what poor sea creatures might wash up and scare their kids at the beach.

For the reasons described above as well as the many environmental concerns I'm sure others have voiced to you already, I implore you to please reject the proposal and play a role in putting the pulp mill to rest.

Sources:

1. Web article: <https://www.nationalobserver.com/2018/07/25/analysis/uproar-nova-scotia-over-plan-dump-pulp-effluent-northumberland-strait>
2. Victim impact statement: <http://canadianaboriginallaw.com/wordpress1/wp->

- [content/uploads/2016/02/PLFN-Victim-Impact-Statement-2016-02-221.pdf](#) and Web articles:
<https://nsadvocate.org/2018/12/09/weekend-video-boat-harbour-and-the-mill/>
and <https://aptnnews.ca/2018/07/16/its-a-dead-zone-says-pictou-landing-elder-about-pulp-mills-effect-on-harbour/>
3. Web article: <https://www.thechronicleherald.ca/news/regional/fishermen-first-nation-still-oppose-pipe-plan-252614/>
 4. Web article: <https://www.thestar.com/halifax/2019/01/31/one-more-year-needed-for-boat-harbour-effluent-plan-northern-pulp-mill-says.html>
 5. See map on pg 162 of the Environmental Effects Assessment Report Registration Document Section 8, https://novascotia.ca/nse/ea/Replacement_Effluent_Treatment_Facility_Project/
 6. Website: <https://parks.novascotia.ca/content/caribou-munroes-island>
 7. Website: <http://lighthousefriends.com/light.asp?ID=1006>

Thank you very much,

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 8, 2019 11:11:59 PM

Project: replacement_effluent_treatment_facility_project Comments: I have great concern regarding the replacement effluent treatment facility project. I believe, at the very least, a federal assessment is required and necessary. o Northern Pulpâ?Ts submission does not prove a lack of significant risk, and is missing critical data on many issues. o There is insufficient evidence to know exactly how broad any damage might be. The companyâ?Ts claim that damage will be â?omiminalâ? is not credible and should not be accepted. o Fisheries, tourism and outdoor recreation are important economic factors and should not be put at risk. o The United Nations Declaration on the Rights of Indigenous Peoples requires not just consultation, but consent by the local Indigenous population. Pictou Landing First Nation is opposed to this proposal. o A 30-day comment period on the companyâ?Ts 2,000-page submission is completely inadequate. o Oceans need more protection, not less. Environmental security outweighs the risk of job loss. New jobs can and will be created if necessary. Thank you, Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 54 y: 29

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 8, 2019 11:25:32 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 12:00:07 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@hotmail.com)

From:
To: [Environment Assessment Web Account](#)
Subject: NP Proposal
Date: March 9, 2019 1:01:27 AM

Please consider a Federal Assessment . Thank you.

Sent from my iPhone

From:
To: [Environment Assessment Web Account](#)
Subject: FW: Environmental assessment of effluent treatment facilitit
Date: March 9, 2019 1:16:17 AM

There must be further assessment as so much is at stake for NS and PEI and NB. We do not know the ingrediants. They will start burning contaminated sludge without a thorough study of emission concerns, the environment, the fisheries, sea life and tourism. Aka are at risk the strait can freeze so how will the warmth fro. The Pope impact lobster spawning grounds. Much further studies need to be done. Tha k you

From:
To: [Environment Assessment Web Account](#)
Subject: FW: Environmental assessment of effluent treatment facilitit
Date: March 9, 2019 1:16:42 AM

There must be further assessment as so much is at stake for NS and PEI and NB. We do not know the ingrediants. They will start burning contaminated sludge without a thorough study of emission concerns, the environment, the fisheries, sea life and tourism. Aka are at risk the strait can freeze so how will the warmth fro. The Pope impact lobster spawning grounds. Much further studies need to be done. Tha k you

From: Advanced Legal Settlements
To: [Environment Assessment Web Account](#)
Subject: FW: Environmental assessment of effluent treatment facilitit
Date: March 9, 2019 1:17:02 AM

There must be further assessment as so much is at stake for NS and PEI and NB. We do not know the ingrediants. They will start burning contaminated sludge without a thorough study of emission concerns, the environment, the fisheries, sea life and tourism. Aka are at risk the strait can freeze so how will the warmth fro. The Pope impact lobster spawning grounds. Much further studies need to be done. Tha k you

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 3:20:56 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

I'm encouraged by my employer Northern Pulp to invest and install the latest technology to protect well paying jobs in Pictou County. Paper Excellence is committed to continue to support Nova Scotia economy and improve their environment footprint. I have worked for mill since I was 19 and hopefully I will get to retire with my full pension that I worked hard to invest in.

Please approve EA for replacement effluent treatment facility and secure Forestry jobs in Nova Scotia.

Signed by:

@northernpulp.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp
Date: March 9, 2019 7:02:59 AM
Attachments: [Northern Pulp"s Effluent Replacement Project EA Submission.pdf](#)

Sent from [Mail](#) for Windows 10

March 7, 2019

**Honorable Minister Margret Miller
Environmental Assessment Branch,
Nova Scotia Environment
P.O. Box 442, Halifax, Nova Scotia
B3J 2P8**

**RE: Northern Pulp Nova Scotia - Environmental Assessment Registration Document-
Replacement Effluent Treatment Facility**

Please see the following document in response to the Environmental Assessment of Northern Pulp's Effluent Replacement Project. The following document will focus on some major concerns of the underwater portion of the proposed pipe and the site-specific characteristics of the seafloor along the proposed route. I am a commercial fisher and harvest lobster, rock crab, and herring from the waters directly surrounding the proposed pipe route and outfall location. I also have a background in structural engineering and have worked on various projects throughout the Maritimes assisting in both the structural design and geotechnical investigation of various structures. This submission will include a combination of site-specific observations and the effects it will have on the structural integrity of the pipe.

Sincerely,

1.0 SEAFLOOR CHARACTERISTICS OF PROPOSED ROUTE

1.1 Effluent Effects Rock Crab Population

Inside Caribou harbour consists mainly of shallow soft sand and mud bottom with portions of broken hard bottom. Such seafloor characteristics create a favourable environment for the rock crab population to flourish. While harvesting rock crab throughout LFA 26A fishers have observed that this inlet presents optimal conditions for juvenile and female rock crabs. If you place traps within the harbour (south/southwest of Munros Island or directly east of the ferry terminal) the majority of the harvested catch appears to consist of small juvenile crab including a high percentage of females. As you move out of the harbour along the proposed pipe route and along the shore east and west the percentage of harvestable rock crab (a rock crab of legal size) within the catch appears to significantly increase. Traps placed further offshore in deeper waters tend to have a catch rate with the majority of the catch consisting of large harvestable crabs with very few undersized crabs. Over the years all of the above has remained consistent and local fishers have concluded that the Caribou harbour acts as a breeding ground and an optimal environment for juvenile rock crab to mature before moving to deeper waters. This raises the major concern of what effect will this effluent have on these juvenile rock crab and the rock crab population as a whole? Not to mention the chain reaction that would occur throughout other species including lobster whose diet consists of a large percentage of rock crab (Fisheries & Oceans Canada, 2013).

1.2 Effects of Site Specifics on Structural Integrity of the Pipe

The marine portion of Northern Pulps pipeline design consists of approximately 4 kilometers of 36" high density polyethylene (HDPE) pipe that will be weighted with concrete ballast and placed in a 3 m trench (providing approximately 2 m of cover to the top of pipe) and will be backfilled with armour stone (Appendix F, Northern Pulp, 2019).

The pipeline location proposed by Northern Pulp presents various challenges that must be addressed to ensure the structural integrity of the pipe. As previously stated, the bottom has been observed by fishers to consist of soft sand and mud bottom with small pockets of hard bottom. With no geotechnical investigation carried out by any of Northern Pulps consultants it is unknown how deep the soft bottom continues. This raises the concern of non-uniform settlement of the soil that will be supporting the pipe. Due to the pipe being placed in a pre-dug trench during the construction phase it is likely that the pipe will experience increased installation deflections due to the trench quickly being filled in with sand due to wave and tidal action, thus creating discrepancies between design pipe elevations and as built pipe elevations. The pipe is also likely to experience increased in-service deflections over time due to the pockets of hard bottom creating a point of solid support while large portions of soft bottom allow for settlement and pipe sag. These deflections will induce increased compressive and tensile bending stresses within the pipe wall resulting in bending strains. The design code aims to limit these strains and the geometric stability of the pipe by setting ring deflection limits of 7.5%. As deflections increase beyond this point geometric stability is eventually lost and the crown of the pipe will begin to flatten and eventually

reverse leading to reverse curvature collapse of the pipe Figure 1 shows observed pipe deformation patterns that lead to failure due to increased pipe deflections (Plastic Pipe Institute, 2014).

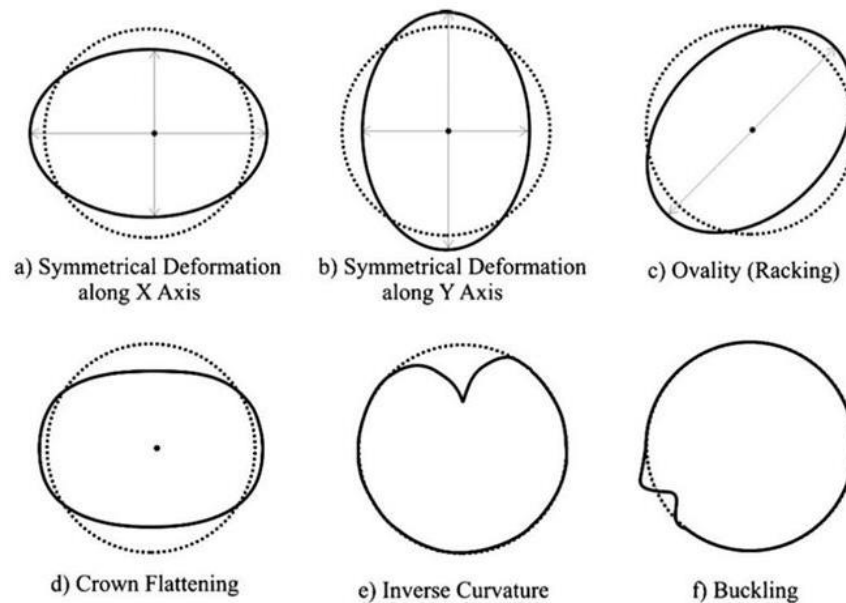


Figure 1: Observed deformations of installed HDPE pipelines (Motahari & Abolmaali, 2010)

Figure 1 is from a study published in the Journal of Transportation Engineers of the American Society of Civil Engineers (ASCE). The study included structural monitoring with video and laser surveillance of over 15,000ft (96 pipelines) of buried HDPE pipe across the USA. It was concluded that the majority of pipelines had actual deformations in excess of design code limits (Motahari & Abolmaali, 2010). This study gives great insight into the possible repercussions of not accurately modeling induced strains in buried HDPE pipes.

Due to the cyclical nature of the tidal forces and wave action these induced stresses combined with ice loads over time could present fatigue stress issues. Although HDPE pipes are extremely flexible making them well suited to bend and adhere to the seafloor, cyclical loading has the potential to cause failure if the site-specific loadings on the pipe are not properly addressed. “One of the causes for failures of HDPE pipes is fatigue which is the result of pipes being subjected to cyclic loading, such as internal pressure, weight loads or external loadings on buried pipes, which generate stress in different directions: circumferential, longitudinal and radial.” (P. 600, Djebli et al., 2014). To accurately determine these site-specific loads, various data is required including accurate geotechnical site investigation with borehole results, hydrographic site surveys including bottom type/depths, potential ice scours, and site observations of ice conditions. It should be noted that none of these are present in Northern Pulp’s submission.

Of all the loads the pipe will experience, ice loads present that largest risk to the structural integrity of the pipe. Potential failure of the pipe due to ice could occur from one of two mechanisms: 1) Direct impact causing a ductile failure (high amount of stress over a relatively short time), 2) Cyclical loading causing a brittle failure (stress levels lower than the mechanical strength of the

material induced repeatedly over a relatively long time) (Zhang, 2005). Brittle failure due to ice impact could occur if any of the following project tasks are neglected: complete a site survey of ice conditions, complete a hydrographic survey depicting any potential ice scours, bury pipe at an adequate distance to account for extreme ice event. Although Northern Pulp shows a pipe buried with cover of approximately 2 meters, they have not completed any of the pre-design field work required to ensure that the pipe is not at risk of failure. When determining extreme ice scouring events, it is also recommended that ice scour surveys be carried out more than once, spaced out over time to gain an accurate depiction of the ice and seafloor interaction (C-Core, 2004). Grounding models such as the one created for a tunnel project crossing the Strait of Belle Isle, Newfoundland can also be carried out to gain insight into ice activity in a given region (C-Core, 2004). The soft soil and shallow design depth of the pipe (approximately 2 meters) also poses concerns for ice and seafloor interaction. If large ice accumulation was present and gouged the seafloor to the unknown depths of the soft bottom there would be no evidence of such gouges once the ice had melted as the sand would infill the gouges within a couple tide cycles. Figure 2 and Figure 3 are a photo's taken March 4th, 2019 from the Caribou light house, the PEI ferry can be seen docked in the background.



Figure 2: Ice southeast of Caribou lighthouse along proposed pipe route (March 4th, 2019)

This photo shows extensive ice directly over the proposed pipe route. Locations where water depths are as shallow as 1 meter have ice piles of 3-4-meter heights above sea level. It is not unlikely to conclude from these photos alone that potential for ice impact at a depth of 2m below seafloor bottom in a soft bottom is a very real possibility that could lead to a ductile failure resulting in the catastrophic event of premature released effluent into the Caribou harbour. Figure 3 shows more ice further north along proposed pipe route.



Figure 3: Ice east of Caribou lighthouse along proposed pipe route (March 4th, 2019)

now retired, fished the waters surrounding the proposed pipe location for 55 years. Along with other species fished lobsters along the shores of Caribou Island. He recalls one winter when ice conditions were at their peak, one of his most lucrative lobster spots was completely wiped out by the ice. North of Black Point the bottom consisted of dense hard bottom with drastic elevation changes in the bottom including a large trench where lobsters could always be found. The following spring the rock bottom had been completely changed and the trench had been filled in.

a long-time fishermen and a commercial diver in the area for 25 years have also seen the power of the ice in the area. One spring could not seem to get his traps boarded as they were tangled on something on the bottom. When dove to retrieve them a navigational marker buoy from PEI was found drove into the rock bottom by the ice.

3.0 RECEIVING WATER STUDY

Events that would be catastrophic to the marine ecosystems include: 1) Structural failure of the pipe causing effluent to be released prematurely of the discharge location. 2) Errors in the receiving water study including tides, water flow, mixing characteristics at discharge location, lack of consideration for climate change effects will have on mixing characteristics.

The shallow soft bottom that extends south of the Caribou lighthouse combined with Munroe's Island extruding westward creates a bottleneck effect for the water currents. This bottleneck effect is also accelerated by the water moving in from deep waters to shallow waters on a rising tide.

These physical characteristics create accelerated tides and wave action, across the proposed location. These conditions combined with a prevailing north wind can cause water to swell into the harbour and hold waters in the harbour longer on a rising tide this gives the harbour very poor flushing characteristics. If there were a failure in the pipe at a location prior to the diffusers there would be no chance of meeting the dilution standards. The same could be said about the diffuser location if there is any variability in the water/mixing properties that were used in the receiving water study. Although computer modelling can give great insight into complex problems performing thousands of iterations and time steps in the matter of seconds, the results are only as good as the variables that were entered into the model. When dealing with a project with environmental consequences as catastrophic as this, each variable of tidal data, water depths, salinity, mixing characteristics etc. must be observed and calculated in a timely manner to ensure the level of confidence of the model is extremely high.

In near field portion of the receiving water study Stantec states “No historical water quality data are available for Northumberland Strait around the CH-B location. Data from the neighbouring Pictou Road (Stantec, 2017) located about 6 km southeast were used.” (Stantec, 2018). While in the far field portion of the study they simply extended the boundaries of the previous model created for the previous outfall location in the original study that was completed for Pictou Harbour (Stantec, 2017). I will not attempt to touch on the technical data within the receiving waters study as I do not have the educational background to do so. I will however pose the following questions: Has adequate field investigations been carried out to ensure the results of these models are correct? Is stating there was no historical data thus we used data from our previously studied location sufficient? Should actual water sampling have been carried out at the actual location? Is this project being fast tracked? The study concludes that “The effluent discharged at the CH-B location is predicted to be dispersed and transported predominantly with offshore currents in the northwest and southeast directions. The effluent intrusion into Caribou Harbour is predicted to be minimum.” (P.27 Stantec 2018). With what level of confidence can they make this statement while some data was simply pulled from the original location of Pictou Harbour? Have they modelled the bottleneck effect that all fishermen are aware of?

4.0 CONCLUSIONS & RECOMMENDATIONS

Due to the lack of detail presented concerning site-specific data of various elements of the project, the minister must request an environmental assessment report. The report should include a geotechnical investigation, hydrographic survey and further investigations detailing ice presence. Pipe deformation issues should be addressed and a study must be conducted to ensure that direct ice impact will not occur. A detailed tidal study should be carried out to ensure that the effluent will not intrude into Caribou harbour severely effecting the marine ecosystem.

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From: [Environment](#)
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 8:12:05 AM

Project: replacement_effluent_treatment_facility_project Comments: I support the mill workers and realize the impact the closure of the mill would have on the nova scotia economy so hopefully a federal assessment will satisfy everyone . Name: Email: Address:

Privacy-Statement: agree x: 37 y: 24

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 8:52:19 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
 @unifor.org)

From:
To: [Environment Assessment Web Account](#)
Subject: Re: Northern Pulp Effluent Treatment Facility
Date: March 9, 2019 9:09:55 AM
Attachments: [Nova Scotia Department of Environment - Northern Pulp.pdf](#)

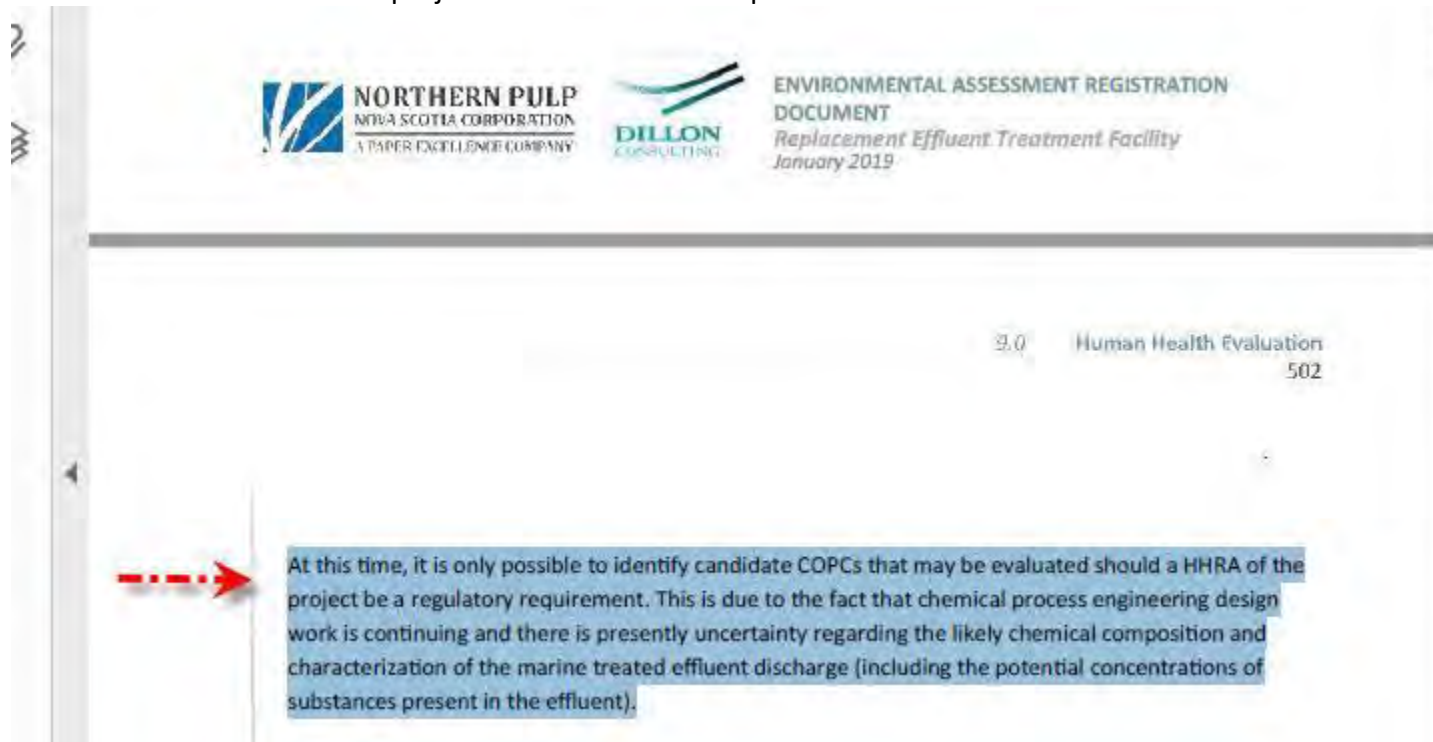
Environmental Assessment Branch, Nova Scotia Environment
P.O. Box 442,
Halifax, Nova Scotia B3J 2P8
Via E-mail at ea@novascotia.ca

RE: Northern Pulp Effluent Treatment Facility

Good morning,

I am writing to you today to express my concerns regarding the Northern Pulp Effluent Treatment Facility with special trepidation regarding the indication that effluent from this facility will be pumped via a pipeline that passes by the Town of Pictou's watershed land and then dumped into the Northumberland Strait.

I am a resident of Pictou having moved here over years ago. I have spent much of my career in the business world and one component of my work has been establishing whether the RISKS associated with a project are acceptable and assuring that if the risks are greater than the outcome, a project will not move forward. I believe in the case of a pipe being constructed to carry effluent – the chemical makeup of which is not 100% known (according to the Environmental Assessment document submitted by Northern Pulp) - creates a scenario where the risks associated with this project ARE NOT worth the potential outcome.



From my perspective let's look at some of the parties that will be impacted by this project when something does go wrong – and looking at the history of this company (as well as previous owners), something will. The fact is that at times pipes leak and sometimes break. We have

been made aware of two leaks in the current system at Northern Pulp in the past several years. The conditions where a pipeline is installed, the person(s) installing the pipeline and the actual pipe itself are all subject to the real risk of leakage and potential environmental damage.

1. Fisheries

The risks associated with this project include extensive damage to the ecosystem in the Northumberland Strait. This will directly impact the livelihoods of fishermen and fisherwomen in three provinces directly (Nova Scotia, New Brunswick and Prince Edward Island). This industry is a multi-billion-dollar business which exports seafood internationally. Just imagine what would happen if this pipe went in and the effluent is harmful to the marine life. Mad cow disease took decades to recovery from and it doesn't take much imagination to see what would happen to this industry.

We have the most pristine cold waters. In 2017 the value of our seafood exports was \$2.0 billion. Infrastructure at Halifax Stanfield Airport has begun to increase with holding areas for lobster and with 3-5 air cargo shipments to China per week, as well as flights to Seoul, Korea.

Northern Pulp constantly talks about their "spin-off" jobs. Fisheries also has "spin-off" jobs – it is another product that requires the same structure to export. Let's not forget those.

2. Tourism

The Tourism sector also brings billions into this province mainly due to our clean oceans, beautiful beaches and magnificent scenery – not to mention the friendly people. Why would we want to put this at risk? Even taking into account the number of "spin-off" jobs Northern Pulp states, the RISK is not worth it. The Tourism industry employs thousands of people in Nova Scotia and has far more economical impact than the 277 jobs at Northern Pulp. This company is part of Paper Excellence who have a horrid record on the environment internationally.

In addition, there is the "spin-off" revenue that is brought to the many cities and towns that the tourists visit – and spend their money. Nova Scotia is "**Canada's ocean playground**". If there is an incident in the waters of the Northumberland Strait, there will be no recovery.

3. Local Real Estate Market

If such a break would occur, there is also the potential for the real estate market to die completely in this area of Nova Scotia - for homes and cottages. I personally will have to consider selling both my home in Pictou and my cottage on Cape John should a decision be made to move forward on this project. If and when there is a breach in the pipe effecting either the Pictou watershed or the Northumberland Strait, this would render both properties unsaleable and that is not a risk I am willing to take. I also expect that

should this occur, the Nova Scotia government will have liability to its citizens in this case – after all these would be preventable damages.

4. **Town of Pictou residents**

Now that the plan has been filed, the matter of the pipe and where it is planned to be constructed and where it will dump the effluent is known. There are many better qualified people who can and I am sure will speak to the chemical nature of the effluent (what is known at least) however I can speak to the fact that the pipe is to be constructed close to the watershed for the Town of Pictou. We have just come to the point of having clean water in our town, thanks for grants from both the Federal and Provincial governments as well as rate adjustments to the town residents. This has been a multi-year and multi-million-dollar project and in NO WAY should any risk be taken with regards to clean water in our town.

The Town of Pictou heard about this via the media, like everyone else. As a major stakeholder in this situation this is unacceptable and again finds Northern Pulp not true to their word. There has also been NO information sessions on this project held in the Town of Pictou which to me is quite telling.

5. **Pictou County residents**

There is also the consideration of the quality of air. This part of the province has suffered enough regarding this – every citizen should be able to open their windows on a nice warm day and the reality here is that we can't. This should not be the case in Nova Scotia. It has greatly affected the businesses in our town – many who have left since visitors want no part of this.

Several local medical doctors have recently written concerning the quality of the air here (John Krawczyk, MD ; Anne Kwasnik- Krawczyk, MD; Maurice Strasfeld, MD; Gerry Farrell, MD; and Catharina Felderhof, MD). Their full letter can be found at <https://nsadvocate.org/2019/03/06/letter-northern-pulp-wealth-over-health/?fbclid=IwAR3JOvaYq1ncax-lvZNPzsv3P29IFunDd-qN6I7NQxCKGXSPKzvlhmhMvVs> – however here is a brief excerpt regarding the particulate matter coming into the air from the pulp mill:

“In 2013 the WHO declared PM 2.5 carcinogenic to humans. Once in the air it can stay in the air for days to weeks and it can travel hundreds to thousands of miles. The new precipitator installed on the recovery boiler addresses a percentage of the PM2.5. The main boiler has no precipitator, but has scrubbers. These mechanisms require constant maintenance to operate with high efficiency. The results of the operating efficiency should be transparent and made public and tested more frequently.”

I would also refer you to an article from Dalhousie University that was published earlier this week on the cancer-causing impact of the air emissions released from Northern Pulp, which can be found at https://www.halifaxexaminer.ca/province-house/dalhousie-researcher-breaks-silence-over-pulp-mills-cancer-causing-air-emissions/?fbclid=IwAR1vhmXpQra7s5kcivyS0NC9fJRiunR2399AcW-DTdPm_WPogPFhwjwag3l

As well, in the Environmental Assessment document, Northern Pulp used the Tasmania Pulp mill for comparison for part of the Human Health Evaluation

- * It is important to note the Tasmania mill DID NOT open and faced many environmental challenges in court https://en.wikipedia.org/wiki/Bell_Bay_Pulp_Mill
- * It also DID NOT undergo regulatory review by Health Canada
- * There was no mention of their effluent facility technology
- * It was using hardwood eucalyptus not softwood

From the EA:

"The Tasmania pulp mill process mainly hardwood eucalyptus chips. There is some uncertainty regarding how the wood chips processed at the NPNS mill, which are from softwood coniferous species, would compare to eucalyptus chip processing, with respect to potential effluent chemistry differences." EA. Section 9-15 page 492

The Toxikos (2006) HHRA of the proposed pulp mill in Tasmania was reviewed in detail. It is considered likely that the assumed effluent chemistry for the Toxikos HHRA is representative of expected future effluent chemistry for the NPNS project. Both the effluent treatment plant and marine diffuser pipe design for the Tasmania study are similar to what has been proposed for the NPNS project. Also, both mill facilities utilize ECF bleaching processes, and this will not change for future NPNS mill operations. While there are some uncertainties associated with the representativeness of the effluent chemistry characterization presented in Toxikos (2006) to the proposed future NPNS project effluent (as noted above), it is believed that there are sufficient similarities to state that the Toxikos (2006) information can serve as an indication of what may be expected in relation to NPNS project effluent composition/characteristics (KSH Consulting, personal communication).

Review of the Toxikos HHRA has also determined that some of the approaches used/decisions made within this study, with respect to screening and identifying COPCs, may be appropriate to apply in the event a HHRA of the NPNS project is required.

It must be acknowledged that the Toxikos (2006) HHRA study in Tasmania has not undergone regulatory review by Health Canada at this time, although it appears to be a well conducted and highly conservative study that applied reasonable and standard HHRA approaches and assumptions.

Toxikos (2006) Approach to Identify Candidate COPCs in Treated Effluent

As previously noted, it is believed that the assumed effluent chemistry characteristics and composition as well as the effluent diffuser design for the Tasmania project is similar to what is proposed and designed for the NPNS project. Both mill facilities utilize ECF bleaching processes, and this will not change for future NPNS mill operations. While the proposed Tasmania pulp mill was assumed to process mainly hardwood eucalyptus chips, and there is uncertainty regarding how the wood chips processed at the NPNS mill (which are from softwood coniferous species), would compare to eucalyptus chip

6. Pictou Landing First Nations

The Boat Harbour situation which the people of the Pictou Landing First Nations have been dealing with for over 50 years must come to an end. This is one of the worst cases of Environmental Racism to occur in our county and it is well past time for it to come to an end. On that note, I do not believe any extension should be granted to Northern Pulp. The Boat Harbour Act was legislated in 2015 for closure on Jan 31, 2020. Northern Pulp did not file its Environmental Assessment to the Province of Nova Scotia until January 31, 2019 - only one year from the legislated closure - not enough time to get approval and start purchasing and construction to meet the deadline. Their plan should have been filed well before this.

Nova Scotia has been standing proud with regards to its dealings with our First Nations and has made some great progress in recent years. This is the time to support the Pictou Landing First Nation people. Actions speak louder than words.

Summary

It is time to protect the environment and the people of Nova Scotia. It is time to stop corporate welfare in this province. – a Northern Pulp employee who has been speaking publicly on this matter (see CBC coverage on this topic) has indicated that his employer has “deep pockets”. I would suggest if the mill had wanted to continue its operation here, those deep pockets could be used to create a closed-loop process where there is zero environmental impact (or close to it). I have heard arguments all about how it doesn’t exist however if Northern Pulp can source studies on mills that have never opened, then surely they can discover the science to plan and implement a closed-loop solution.

In my opinion, current government can create a new legacy by doing the right thing here and ending the use of Boat Harbour and ensuring that another environmental disaster does not occur in the Northumberland Strait. #nopipe #noextension

Thank you for your time and consideration of my comments and concerns.

Pictou, Nova Scotia

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 9:23:06 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
@gmail.com)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Effluent Treatment Facility Proposal
Date: March 9, 2019 9:41:08 AM
Attachments: [Northern Pulp's Treatment Facility.docx](#)

Sent from my iPad

March 8, 2019

Dear Nova Scotia Minister of Environment,

I am writing to you to express my concerns with Northern Pulp's Replacement Effluent Treatment Facility. Northern Pulp's proposal of putting a pipe, pumping unknown effluents into the Northumberland Strait, certainly requires more information and answers. Any risk to our fishery, tourism and the environment is a risk not worth taking. I strongly urge you to acquire all the scientific information needed to properly assess the affects that this "unknown" effluent will have on the lobster larvae, herring spawn and human life.

The mere fact that Northern Pulp has stated in their Environmental Assessment (EA document page 489) that "the effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentrations) will not be known with certainty until the project is operational" is concerning and needs further study. Pumping 62 to 90 million litres of this effluent per day into the Northumberland Strait will put our fisheries at risk. Northern Pulp has stated " the identified candidate COPC's in effluent are considered preliminary at this time", therefore, this proposal shows that there is a potential risk to the health of our beautiful Northumberland Strait. Thirty percent of Canada's fishery revenue comes from the Southern Gulf including the Northumberland Strait. The reputation of Canada's fishing industry is built on clean , pristine waters off our coastlines. A threat to this reputation is a risk to all of Canada's fishing industry. Any risk to our Strait and to the reputation of our fishing industry must be examined and studied until we know all the facts.

As a lifelong resident of Pictou I have enjoyed walking our beautiful beaches, especially Munroe's Island. The proposed pipe will be pumping unknown effluent not far from Munroe's Island which is one of Nova Scotia's unspoiled natural beauties and is a sanctuary for birds and wildlife. It is important to protect these delicate areas from environmental dangers. Tourists are drawn to Nova Scotia for its beautiful coastlines and beaches. I have sailed the Northumberland Strait fishing mackerel, lobster and have seen many whales and porpoises swimming in

our waters. Tourism is important for the economy of all Nova Scotians and this proposed pipe with its unknown dangers, effects and deadly consequences to our beautiful coastline places this important industry in jeopardy as well.

In conclusion, Northern Pulp's Replacement Treatment Facility Proposal has too many unanswered questions that will have devastating consequences for our Strait, fishing industry and all of Nova Scotia. I strongly urge you to do a full Environmental Assessment, the unknowns and risks are too many to ignore. Boat Harbour is proof of what happens when decisions are made without knowing all the risks, **when we know better, we should do better**. Do Not let our beautiful Northumberland Strait become the "new" Boat Harbour.

Sincerely,

@hotmail.com

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 9:57:04 AM

Project: replacement_effluent_treatment_facility_project Comments: As a practising Engineer in Nova Scotia, Ive made my career in analyzing, minimizing and preparing for risk. As a general rule: the more unknowns that must be accounted for, the greater the risk. We cant forget that these same scientific arguments emerging from the latest batch of consultant reports paid for by Northern Pulp created our current environmental predicament at Boat Harbour and beyond. This mill wasnt supposed to destroy Boat Harbour, but it did. The airborne toxins werent supposed to elevate cancer levels to the highest per capita in the country... but they did. However, even if all this science somehow worked out, and we all came to an agreement that dumping 90 million litres of effluent into the lobster grounds was somehow a good idea, are you going to eat the lobsters? Is anyone going to eat the lobsters, knowing whats going on here? When the foaming agents start to settle on the beaches but someone in a lab coat tells you its fine, are you going to swim in the water? Even if taking this action didnt violate federal regulation and didnt scientifically remove everything good that this town has left, the perception will. To all environmental ministers involved, I implore you to make the right decision here. Name: Email: @hotmail.com

Privacy-Statement: agree x: 39 y: 25

From:
To: [Environment Assessment Web Account](#)
Subject: Public Comment - Replacement Effluent Treatment Facility (ETF) Project for Northern Pulp
Date: March 9, 2019 10:41:49 AM
Attachments: [Public Comment Effluent Treatment Northern Pulp.pdf](#)

Hello,

Please find attached my personal comment with respect to the Environmental Assessment application for the Replacement Effluent Treatment Facility (ETF) Project for Northern Pulp currently being reviewed.

Thank you,

March 8, 2019

Nova Scotia Environment
Environmental Assessment Branch
P.O. Box 442
Halifax, NS
B3J 2P8

Re: Replacement Effluent Treatment Facility (ETF) Project for Northern Pulp

I am a resident of the Town of Pictou who is very concerned about Northern Pulp's Environmental Assessment (EA) application. After reviewing the company's application documentation, I remain wholeheartedly opposed to the proposal because i) many aspects of the proposal are inconsistent with the principles of sustainable development that are supposed to be protected with the *Environment Act*, ii) the information provided in the documentation is misleading, and iii) there is a lack of trust that, if approved, Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations. Each of these points will be addressed separately below.

- i) The proposal is inconsistent with the principles of sustainable development protected by the *Environment Act*.

The proposal is inconsistent with the principles of sustainable development that are supposed to be protected with the *Environment Act*. In particular, the absence of critical information in the application documentation suggests that the precautionary principle identified in Nova Scotia Environment's Guide to the Environment Act (<https://www.novascotia.ca/nse/ea/docs/EAActGuide.pdf>) ought to outweigh any other consideration. According to the precautionary principle, an activity whose effects are disputed or unknown should be avoided, and therefore, the proposal ought to be rejected because:

- The final characteristics of the effluent are admittedly **unknown** by Northern Pulp and will remain **uncertain** until the new treatment system is up and running as indicated in Section 9.0 Human Health Evaluation, page 502,

“there is presently uncertainty regarding the likely chemical composition and characterization of the marine treated effluent discharge (including the potential concentrations of substances in the effluent”

- The proposal does not include lobster larvae tests or tests on herring spawning grounds, thereby indicating these effects are **unknown**. This is a particularly glaring omission

given that these tests were specifically requested by those directly affected by potential negative effects of the effluent.

- The proposal does not mention the known mercury contamination in the soil and bedrock proximal to the proposed new treatment plant and basins, nor does it acknowledge the potential for disturbing the mercury contamination during construction. (Baxter, J., The Canso Chemicals mystery: With the chemical plant long gone, why is the company still alive? And what about all that mercury pollution?, *Halifax Examiner*, March 7, 2019, <https://www.halifaxexaminer.ca/province-house/the-canso-chemicals-mystery-with-the-chemical-plant-long-gone-why-is-the-company-still-alive-and-what-about-all-that-mercury-pollution/>). Yet, Section 2.5.2 (p.15) of the proposal explicitly identifies that siting decisions of the treatment facility were made with consideration for sensitive environmental features and that mitigation and compensation measures were developed where avoidance was not possible.

“NPNS has emphasized project design and siting so that the location and configuration of the project facilities considers the above measures wherever possible so as to avoid or minimize the potential environmental effects of the project. To the extent possible, project facilities have been sited to avoid and reduce interactions with watercourses, wetlands, areas of elevated archaeological potential, and other sensitive environmental features. Where avoidance was not possible, mitigation or compensation measures have been developed as part of the EA, and will be implemented in consultation with the applicable regulatory authorities.”

It is a gross oversight that the potential disruption of mercury contamination has not been addressed in the proposal and one can conclude that, on the basis of this proposal, the potential risk of mercury disturbance that, while present, is **unknown**.

- Northern Pulp has exhibited a poor track record with their current pipe, experiencing a number of breaks and leaks in recent years. Northern Pulp’s inability to effectively maintain the integrity of their equipment over time would suggest that the ability of the company to prevent environment damage from effluent pipe breaks in the future is **uncertain** at best, not in keeping with the precautionary principle, and, therefore, too risky a prospect.
- Finally, the new effluent treatment system requires burning sludge, but the proposal does not indicate additional pollution abatement equipment that will be a part of the power boiler stack to minimize environmental impacts of burning something with **unknown** characteristics. This lack of information is particularly troubling given Northern Pulp’s historical problems with the power boiler pollution filtration and the limited stack testing currently required. Furthermore, while Northern Pulp has had permits for test burns of sludge in the past, those test burns offer no assurance the sludge burning with the new system would be safe since effluent processing is entirely different and the sludge will be different given that it will undergo less ‘polishing’.

ii) Some of the information provided in the application is misleading.

Some of the information provided in the application is misleading, specifically with respect to the quality of effluent that will result from the new treatment facility.

- First, in the public information sessions presented by Northern Pulp in December 2017, the effluent quality promised was contingent on Northern Pulp installing an oxygen delignification system. The proposal has been revised since the plans presented in 2017, but the promise of improved effluent quality remains despite oxygen delignification not being part of this proposal. If oxygen delignification is required to achieve the predicted effluent quality as promised, why is it not included in the proposal? And, if the proposal is assessed at face value and approved based upon predicted effluent quality dependent upon oxygen delignification, but oxygen delignification is not proposed, can the facility proceed and have poorer quality effluent as a result?
- Second, Northern Pulp's promise of improved effluent quality is misleading based upon the company's own admission in internal communication. Despite publicly claiming the effluent will be better, internal documents acquired by environmental lawyer Jamie Simpson acknowledge that it will, in fact, be worse due to losing the 'polishing' time that Boat Harbour affords. (Jamie Simpson's interview with CBC Information Morning can be accessed here: <https://www.cbc.ca/listen/shows/information-morning-ns/segment/15672343>)
- The two points above refer to promises by Northern Pulp that effluent quality will be improved. Yet, as previously indicated, by the company's own admission, the actual characteristics of marine effluent are unknown. Therefore, it is challenging to understand how a promise of improved effluent quality can be made, if the effluent characteristics are uncertain.
- In addition, Emma Hoffman, the author of one study cited by Northern Pulp in their EA proposal has recently responded to the interpretation of their work within the EA document and have explicitly stated that Northern Pulp has misrepresented its scientific contribution, thereby raising concern about the representation of other studies included in the proposal (Pannozzo, L., Dalhousie researcher breaks silence over pulp mill's cancer-causing air emissions, *Halifax Examiner*, March 7, 2019, <https://www.halifaxexaminer.ca/province-house/dalhousie-researcher-breaks-silence-over-pulp-mills-cancer-causing-air-emissions/>).

iii) There is a lack of trust that, if the project is approved, Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations.

- Lastly, there is a lack of trust that Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations or adequately monitor the terms and conditions of this environmental assessment, should it be approved. The provincial Auditor General has identified this specific issue as a concern as recently as 2017 where his November 2017 report clearly stated that "Nova Scotia Environment is not monitoring terms and conditions attached to approved projects", (Report of the Auditor General to the Nova Scotia House of Assembly, November 1, 2017, p. 45; https://oag-ns.ca/sites/default/files/publications/FullNov2017_1.pdf). And, using history as a guide,

NSE has demonstrated numerous challenges with effectively monitoring Northern Pulp and enforcing the regulations it has imposed as highlighted below.

- Nova Scotia Environment (NSE) has the responsibility of creating and enforcing the rules for Northern Pulp's current effluent pipe, yet there have been at least three pipeline leaks in recent years (2008, 2014 and 2018). And, despite increasing efforts by the regulator to improve pipeline monitoring by the company in response to the recent pipe breaks, those efforts did not result in preventing future leaks.
- The current monitoring and enforcement model employed by Nova Scotia Environment (NSE) requires companies self-report problems and breaches. More than a decade ago, in 2008, a review of NSE by the Office of the Auditor General identified this as an area of concern and recommended that,

“The Division should establish procedures to obtain objective evidence to validate the accuracy of monitoring reports received from approval holders”.

(Recommendation 3.2, <https://oag-ns.ca/sites/default/files/publications/2008%20-%20Feb%20-%20Ch%2003%20-%20Environment%20and%20Labour%20-%20Env%20Mon%20and%20Compliance.pdf>)

Yet, the 2017 Report to of the Auditor General to the House of Assembly (https://oag-ns.ca/sites/default/files/publications/FullNov2017_1.pdf) notes that this recommendation had not yet been addressed. As a result of failing to implement a solution per the Auditor General's decade-old recommendation, NSE has proven to have lessened awareness of certain problems and have been unable to minimize what could be preventable environmental damage. Some examples that illustrate NSE's limited objective oversight with respect to Northern Pulp include the following:

- Northern Pulp had problems with their power boiler scrubber identified to them by a consultant in 2006, but NSE did not become aware of the situation until 2008. Had NSE been relying on objective oversight, the problem could have been identified much sooner rather than obviously allowing the company to continue operations.
- Subsequently, NSE issued an industrial approval in 2011 despite the company failing to address their air pollution problems. The Minister of the Environment stated that NSE was unaware of the ongoing air pollution issues when the 2011 Industrial Approval was issued despite evidence to the contrary provided by NSE to the environmental group Clean the Mill (CBC News, Northern Pulp air quality monitors years behind schedule, October 7, 2014, <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-air-quality-monitors-years-behind-schedule-1.2789892>). It was not until 2012 that NSE finally issued a directive to the company to address the problem. This example illustrates a lack of communication within NSE, further reinforces the need for objective information to be used in decision making within the Department in order to prevent damage from environmental regulation violations and further justifies the decreased public trust in NSE's ability to protect the environment.

- When the effluent pipe broke in 2014, NSE grossly underestimated the volume of effluent lost at be 4 to 5 million liters ((CBC News, Northern Pulp charged with releasing effluent into fish habitat, October 14, 2015, <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-spill-charge-1.3270154>). However, the actual volume released turned out to be 47 million liters which was only revealed in court proceedings after a federal investigation (Withers, P., Northern Pulp fined \$225K for ‘toxic’ effluent pipe leak, CBC News, March 23, 2016, <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-mill-effluent-leak-fine-1.3504203>). NSE has no way to independently monitor the current pipe or that proposed in this EA application not does it have the ability to validate the information reported by the company. As a result, NSE must rely on the face value of information provided by the company, a situation that has proved problematic in the past.
- Despite Northern Pulp's 2015 Industrial Approval requiring the company 'operate and maintain real time flow monitoring equipment ... designed to immediately notify the approval holder in the event of a total loss of flow or a reduction of flow below normal operating conditions', it was a member of the public that identified and reported the most recent pipe leak in October 2018. (Brimicombe, H., Northern Pulp line springs another leak, *The Advocate*, <http://pictouadvocate.com/2018/10/24/northern-pulp-line-springs-another-leak/>).
- Where Northern Pulp’s information has proved inaccurate in the case of the 2014 pipe break, was missing in the case of the malfunctioning power boiler scrubber between 2006 through 2008, and the public needed to report the pipe break case of 2018, it seems unrealistic to think that NSE has the capacity to effectively monitor a new pipe and proactively limit environmental risks.
- Over the years, NSE has issued multiple directives to Northern Pulp to correct air emissions violations. Yet, these directives were ineffective at generating an immediate solution. Instead, Northern Pulp was given excessive timelines (often years) to correct problems. If a problem occurs with the proposed pipe or at the proposed new on-site treatment facility, problems need to be able to be identified and addressed immediately not with the excessive timelines we have become accustomed under the current monitoring and enforcement model. There is no amount of time that would be acceptable to fix problems that risk damaging the Town of Pictou’s watershed or the commercial fishery.

In summary, I remain wholeheartedly opposed to Northern Pulp’s effluent treatment proposal. Several aspects of the proposal are inconsistent with the principles of sustainable development that are supposed to be protected with the *Environment Act*. The information provided in the proposal documentation is misleading. And, finally, there is a lack of trust that, if approved, Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations.

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Cc:
Subject: Response to Northern Pulp's Environmental Assessment
Date: March 9, 2019 10:48:02 AM
Attachments: [Response to Northern Pulp's Environmental Assessment.pdf](#)

Dear Minister Miller,

Please find my response attached.

Yours truly,

Signed in Agreement,

BY EMAIL: ea@novascotia.ca

8 March 2019

To: The Honourable Margaret Miller, Minister of Environment

Re: Response to Northern Pulp's Environmental Assessment

Dear Minister Miller,

I am writing to submit comments on Northern Pulp's Proposed Replacement Effluent Treatment Facility Project.

I am retired from the Canadian Forces having done a tour to Camp Mirage and another to Afghanistan. While there I was exposed to burning of toxic garbage, and the stench from a poo pond. In the summer of 2014, there were many days that we couldn't see the children playing in the park across the street due to the toxic smog that was hanging over the Town of Pictou. I was appalled that the Province of NS was allowing the same toxicity to happen in Nova Scotia that had happened in Afghanistan. It was clear at that time that Northern Pulp didn't care about those being exposed to the toxins, Pictou County or the Province and it took public pressure and our taxpayer money to force Northern Pulp to fix the problem.

At that time, I was oblivious of Boat Harbour and the environmental racist disaster that was in my backyard. Late in 2017 I read a book by Joan Baxter that clearly explained the problems with the pulp mill across Pictou Harbour. I was once again appalled that in Canada a company could try to block the release of this book. I was quickly losing respect for the owners of Northern Pulp. When I learned that my Provincial Government signed agreements stating that we are responsible for the effluent, in fact the Province owns the responsibility for the effluent and Boat Harbour. I asked myself how can the Province, the Department of Environment be involved in any decision for a proposed replacement to the effluent treatment plant, when in fact it will be their plant, paid for by taxpayer dollars? This is a blatant conflict of interest.

I next asked myself how the Nova Scotia Department of Environment could decide on effluent going into the Northumberland Strait when it does not just affect Nova Scotia, it affects PEI and New Brunswick.

So, you are in a conflict of interest making a decision for 3 provinces, sounds like Afghanistan to me but this is Nova Scotia, this is Canada. I asked myself how this can be happening.

Then I looked at the proposed plan to dispose of the effluent, going overland, across the Pictou watershed, to Caribou Harbour. Now, Northern Pulp would have me believe that this effluent won't affect our fish, our wildlife or our beaches but I find that very difficult to believe. Nothing lives in Boat Harbour, even treated effluent is so hot it has a kill zone. So, I wondered to myself, if they think we are all stupid. Does the Province, do you think we are stupid enough to accept another Boat Harbour, we will be surrounded by toxic chemicals, we will be at risk of their pipes, which periodically break and spill effluent, polluting our Pictou watershed and our water.

I didn't come back from serving my country, to be exposed to toxins on all sides and I will tell you right now you might as well wipe Pictou off the map, pay off all the residents, pay off all the fishermen because we will have no future in Pictou County if you allow this pipe to flow into Caribou Harbour. This is not Afghanistan where a government can do whatever it wants to its citizens, this is a democracy. Conflicts of interest, blatant greasing of palms are illegal, as well as immoral. The Nova Scotia Department of Environment should not be making this decision, this decision should be assessed by the Federal Department of Fisheries and the Federal Government.

My understanding is that within the Act, the Minister must make their decision on factors set out in the Environment Act. You must decide if the project will cause adverse effects or significant environmental effects and if so, can they be mitigated. Well, I say:

1. Any death of fish and lobster spawn is an adverse effect and any loss will be significant to the billion-dollar lobster fishery in PEI, NS and New Brunswick and can't be reversed or mitigated. Boat Harbour proves this, you might as well pave it over it is so full of dioxins, ferons, and mercury it will be decades before it is habitable. I would not consider Boat Harbour closure, and cleanup mitigating the effects. Is this the plan for the Northumberland Strait and Caribou Harbour, and the Pictou Watershed, pollute it for 10 years and then do another cleanup costing us, the taxpayers, millions of dollars. How do you mitigate the loss of quality of life, loss of tourism and loss to the billion-dollar lobster fishery? In my opinion, you can't. And once again how can you make a decision that affects 3 provinces?
2. A spill in the Pictou watershed is an adverse effect, we don't salt in the watershed, no pollution is allowed in the watershed, once there is a spill there will be no way to repair our watershed. This is an adverse effect that has happened many times over the 50 years the pulp mill has been in existence and it is very probable that this will happen in the Pictou watershed. The First Nations have been drinking bottled water for decades, would you consider this mitigating the effects? I would not. It is unacceptable to run this pipe over the Pictou watershed and it is once again apparent that Northern Pipe does not care about the citizens of Pictou or Pictou County by considering this an acceptable plan.

In closing, I would like to state that environmentally Northern Pulp has poisoned our air, our water, and our lands in Pictou County. We suffer higher rates of unusual cancer, lung issues, etc. Tourists smell the stench and leave, affecting tourism operators and offshoot businesses. For 50 years these effects have not been mitigated, they are significant environmentally, personal health, and enjoyment of Pictou and Pictou County. It is time for the Nova Scotia Department of Environment to take to task Northern Pulp

and not accept a pipe going into any waters, overland or otherwise. A closed loop system is the only solution to Northern Pipe remaining in Pictou County. I hope you are not another member of the old boys club that failed to look out for people who elect them, and failed to protect sustainable and viable local industries such as in-shore fishing and tourism while supporting unsustainable and polluting industries such as pulp and paper which harms the environment, and treats this province like we are a third world country. This is not Afghanistan, I exhort you to stand firm and move forward environmentally and not backward, there can be no pipe in Northumberland Strait/Caribou Harbour and Boat Harbour must close.

Yours truly,

Signed in agreement,

Postscript:

, have contacted the Department of Environment by phone, many times and left messages never to have any calls returned. I look forward to your reply to this letter.

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulps's Replacement Effluent Treatment Facility Project
Date: March 9, 2019 11:24:59 AM
Attachments: [Miller ltr EA.pdf](#)

March 9th, 2019

Environmental Assessment Branch

Nova Scotia Environment

P.O. Box 442 Halifax, NS,

B3J 2P8

Submitted via email: ea@novascotia.ca

RE: Northern Pulp's Replacement Effluent Treatment Facility Project

-
Dear Minister Miller,

I have been active working with a number of groups over the past few years on the critical environmental problems surrounding offshore drilling including its dire effect on marine mammals, the risks to our seafood and tourism industries, and above all the industry-captive nature of our offshore regulatory regime, notably the CNSOPB. What does this have to do with Northern Pulp's proposed Effluent Treatment Facility? Everything. The problems and effects are the same.

The way we treat our oceans, plastic dumping, chemical dumping, our continued reliance on fossil fuels in the face of spiraling temperatures and the coming climate change cataclysm, all these things are fundamentally related to the Northern Pulp proposal.

I have read their submission in detail and find their treatment of facts both cavalier and unrealistic.

For example, their proposed Activated Sludge Treatment system can't be fool proof as they argue. Considering the mill's appalling history of dissembling and extorting financial support from successive provincial governments, their track record is as polluted as the effluent they propose to spew into the Northumberland Strait. Note the blurred lines between the regulated and the regulator including retired politicians now working on the corporate side, not to mention their proposed "new" system's reliance on a power boiler with a dismal emissions record.

Despite the best intentions of your Staff, to have a provincial EA executed by a government in the case of the Pictou mill so beholden and prey to political influence is totally unacceptable.

I do not envy your responsibility to make a decision in this case, and urge you to contribute to finding a real solution to the problem, not some rushed and cursory proposal from a dilatory proponent with zero skin in Nova Scotian's long term game. In my opinion, we should show Paper Excellence the door and start encouraging the re-design of our forestry industry per the Lahey Report, and adopt a Green Jobs approach to re-tooling Nova Scotia's paper manufacturing industry. Trying to retrofit a decrepit 50 year-old mill is clearly a poor choice for Nova Scotia's future.

Thank you for the opportunity to express my opinions.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 11:36:28 AM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@unifor5555.ca)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's EA proposal
Date: March 9, 2019 11:55:19 AM
Attachments: [Response to NP ETF proposal0001.pdf](#)

Please see my attached written comments in response to Northern Pulp's proposal for a new effluent treatment facility. My comments consist of a letter (9 pages) and attachments (16 pages).

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, Nova Scotia B3J 2P8
Fax: (902) 424-6925

Via e-mail at ea@novascotia.ca
and fax 1-902-424-6925

Dear Sir or Madam:

RE: Northern Pulp's Replacement Effluent Treatment Facility Project

I am writing to comment on Northern Pulp's proposed Replacement Effluent Treatment Facility Project.

I am a life long resident of Pictou County and have many ties to the Northumberland Strait. For over 40 years, my family has owned a cottage along the Northumberland Strait. I have spent each summer walking the beaches and swimming the waters. I have worked in Pictou as a lawyer for over 25 years and am a volunteer member of several boards and organizations in the area, including the Northumberland Fisheries Museum and Heritage Association, which is dedicated both to the preservation of fishing history and the celebration of the fishing culture. I am married to a commercial fisherman who fishes the waters of the strait, like many generations of his family who came before him. Involvement in the commercial fishery is a family commitment that is shared by our children and shapes our lives on a day to day basis. Like so many people in Pictou County and beyond, the Northumberland Strait is beloved by me and my family and is the cornerstone of our economic prosperity, social enjoyment and mental well being. The risk that Northern Pulp's proposed Effluent Treatment Facility Project poses to the Northumberland Strait and all who rely on it is simply too great for the Minister to grant approval.

Regulation 12 of the Nova Scotia *Environment Act* sets out the factors the Minister must consider when making her decision:

12 All of the following information shall be considered by the Minister in formulating a decision under subsection 34(1) of the Act:

(a) the location of the proposed undertaking and the nature and sensitivity of the surrounding area;

- (b) the size, scope and complexity of the proposed undertaking;
- (c) concerns expressed by the public and aboriginal people about the adverse effects or the environmental effects of the proposed undertaking;
- (d) steps taken by the proponent to address environmental concerns expressed by the public and aboriginal people;
- (da) whether environmental baseline information submitted under subclause 9(1A)(b)(x) for the undertaking is sufficient for predicting adverse effects or environmental effects related to the undertaking;
- (e) potential and known adverse effects or environmental effects of the proposed undertaking, including identifying any effects on species at risk, species of conservation concern and their habitats;
- (f) project schedules where applicable;
- (g) planned or existing land use in the area of the undertaking;
- (h) other undertakings in the area;
- (ha) whether compliance with licences, certificates, permits, approvals or other documents of authorization required by law will mitigate the environmental effects;
- (i) such other information as the Minister may require.

Regulation 13(1)(e) made pursuant to the *Environment Act* states that one of the decisions of the Minister upon registration of a Class 1 undertaking may be as follows:

“that a review of the information indicates that there is a likelihood that the undertaking will cause adverse effects or significant environmental effects which are unacceptable and the undertaking is rejected.”

Section 34 (1) of the Nova Scotia *Environment Act* states that the Minister shall make one of six listed determinations upon the registration and review of an undertaking. I submit that, based on the factors listed in Regulation 12 set out above, it is appropriate that the Minister reject the undertaking as per section 34(1)(f) “because of the likelihood that it will cause adverse effects or environmental effects that cannot be mitigated.”

ERRORS, MISREPRESENTATIONS, CONCERNS

In my review of Northern Pulp’s proposed Replacement Effluent Treatment Facility (ETF) Project, I identified many errors, misrepresentations, and concerns. These are as follows:

1. Definitions: Commencing at Page xxiii, there are a number of words that are defined for the purposes of the proposal. Not all of the definitions used are the same as the definitions of the same terms used in relevant legislation, including the following definitions (emphasis are mine):

- (a) **Contaminant** is defined in the *Environment Act* as: “contaminant” means, unless otherwise defined in the regulations, a substance that causes or may cause an adverse effect;

Contaminant is defined in the ETF proposal as: “A biological, chemical, physical or radiological substance that becomes harmful for humans or living organisms, when accidentally or deliberately introduced to air, water, soil or food.”

- (b) **Deleterious** substance is defined in the *Fisheries Act* as: deleterious substance means

(a) any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water, or

(b) any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water,

and without limiting the generality of the foregoing includes

(c) any substance or class of substances prescribed pursuant to paragraph (2)(a),

(d) any water that contains any substance or class of substances in a quantity or concentration that is equal to or in excess of a quantity or concentration prescribed in respect of that substance or class of substances pursuant to paragraph (2)(b), and

(e) any water that has been subjected to a treatment, process or change prescribed pursuant to paragraph (2)(c); (substance nocive)”

Deleterious substance is defined in the ETF proposal as: “A substance that is dangerous and harmful.”

- (c) **Mitigate** is defined in the *Environment Act Regulations* as: “mitigate” means, with respect to an undertaking, to eliminate, reduce, or control the adverse effects or the significant environmental effects of an undertaking, and may include restitution for any damage to the environment caused by such effects through replacement, restoration, compensation or any other means;

Mitigation is defined in the ETF proposal as: “With respect to a project, refers to the elimination, reduction or control of the adverse environmental effects of the project and includes restitution for any damage to the environment caused by such effects through

replacement, restoration, compensation or any other means.”

- (d) **Significant** is defined in the *Environment Act Regulations* as: “significant” means, with respect to an environmental effect, an adverse effect that occurs or could occur as a result of any of the following:
- (i) the magnitude of the effect,
 - (ii) the geographic extent of the effect,
 - (iii) the duration of the effect,
 - (iv) the frequency of the effect,
 - (v) the degree of reversibility of the effect,
 - (vi) the possibility of occurrence of the effect;

Significance is defined in the ETF proposal as: “A defined threshold of acceptability. The significance of adverse environmental effects is determined by a combination of scientific data, regulated thresholds, standards, social values and professional judgment. For example, the ecological context of a project may be determinant of whether likely adverse effects are significant.”

It is noted that the term “**adverse effect**” is not defined in the ETF proposal. It is defined in the *Environment Act* as “an effect that impairs or damages the environment or changes the environment in a manner that negatively affects aspects of human health”.

Also noteworthy is the definition of the term “**reach**” in the ETF proposal. It is defined as, “In the context of this project, a reach is a section of watercourse of defined length (usually 100 m) in which fish and fish habitat surveys are completed, and water quality measurements are taken.” The term “reach” is not defined in the *Environment Act*, regulations or other applicable legislation.

Because the ETF proposal uses definitions which are different than those set out in the relevant legislation, when the proposal reaches a conclusion or makes a statement, the standards for that conclusion or statement may not be what is set out in the legislation. The conclusion or statement may satisfy the definition the ETF chooses to apply, but it may not satisfy the standard set out in the actual legislation.

Also of concern is the definition of “**change in water quality**” found on page 346 of the ETF proposal, which states, “For the purposes of this assessment, a change in water quality refers to any alteration to pH, dissolved oxygen (DO), temperature, total suspended solids (TSS) or contaminants in the water column.” The definition does not include such things as AOX, BOD, COD or colour.

The definition of “**change in marine fish population**” set out in the proposal is also of concern. On page 384, a change in marine fish population is said to “include any physical injury or mortality on fish attributable to the project, and any destruction or alteration of habitat from disturbance of the marine environment.” It is not clear whether this definition includes such things as bio-accumulation and any other effect or change to fish.

2. The ETF proposal states that the temperature of the treated effluent will reach ambient temperatures within 2 meters of the diffuser and therefore will comply with CCME Guidelines for temperature . This is a misrepresentation of the CCME Guidelines (Canadian Water Quality Guidelines for the Protection of Aquatic Life - see attached), which state, “Human activities should not cause changes in ambient temperature of marine and estuarine waters to exceed +/- 1 degree Celsius at any time, location, or depth.”

3. On page 123 of the proposal, it is stated that, “Dioxins and furans in NPNS’s effluent have virtually been eliminated since the conversion to chlorine dioxide bleaching in 1998. NPNS has never exceeded the limits as per the Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations. In fact, dioxins and furans testing for the last 5 years has consistently shown that all of the compounds required to be tested under the regulations have not been detected in NPNS’ effluent (non-detect).” This statement runs contrary to the test results of samples taken June 11, 2014 from NPNS’ effluent leak. The test results are published on NSE’s website and attached hereto. The test results appear to reveal that there were exceedences of dioxins and furans beyond what is permitted under the Pulp and Paper Effluent Regulations.

4. On page 433 of the proposal, the physical land use in the vicinity of the land-based portion of the effluent pipeline route is set out. There are a number of land uses missing from this list, including single family homes and cottages in the area between the causeway and Division Road, and near the ferry wharf. Also in the vicinity of the ferry wharf and missing from the list are the Caribou fishing wharf, the fishing wharf at North Nova Seafoods, the North Nova Seafoods fish plant, and the Pictou Island ferry. At the fishing wharves, the uses extend beyond the tying up of fishing vessels. At the wharves is where fish buyers set up their buying stations for various fisheries and store bait and catches. It is where fishers work on their vessels and gear. Fishers use water from the Northumberland Strait to wash down their vessels and hydrate and store their catches. The wharves are used by recreational boaters, barges and tugs and those seeking shelter from storms or rough seas. The proposal puts all of these uses at risk.

The ferry service between Caribou, Nova Scotia, and Wood Islands, Prince Edward Island, is a vital link between the two provinces. Any infrastructure or impediment to the use or expansion of the ferry wharf at Caribou should not be permitted. The proposal does not set out details as to the specific location of the proposed effluent pipe. Insufficient details are provided to determine whether the proposed pipe will impact the ferry service now or in the future. The attached article from CBC dated May 5, 2017 confirms that changes to the ferry service are being contemplated.

5. The proposal claims that “operation of the outfall will not interact with use of community beaches in the surrounding area.” (see page 440). This statement appears to contradict the results of the Stantec Final Caribou Discharge Receiving Water Study found in Appendix E1 which shows effluent concentrations washed ashore in various areas. For example, Figures 2.7 and 2.9 shows effluent on the beach at Munro’s Island which is a popular provincial park. Figure 2.11 shows effluent on a beach at Caribou Island which is enjoyed by many locals, cottagers and tourists. I suggest that the presence of effluent in any form on any beach or shoreline will interact

with the use of community beaches.

6. On page 505 of the proposal, it is stated that “Stantec (2019) also reported that ambient air monitoring data for 2015, 2016 and 2017 showed no exceedances of the applicable Nova Scotia regulatory AQC for the air contaminants monitored under the NPNS approval to operate.” This does not appear to be a true statement. Attached is Source Emission Test Results for Winter 2015 and Summer 2015. Both tests were conducted by Stantec and the results were found on NSE’s website. The test results show exceedances for both the recovery boiler and the power boiler as outlined in the company’s industrial approval.

7. The proposal claims that “the loss of vegetation and associated bird habitat within the pipeline footprint area along the road shoulder (if it occurs) will be consistent with existing road maintenance activities along Highway 106 and thus, will not result in any additional loss of bird habitat.” (see page 561). This statement fails to consider the habitat of the double breasted and great cormorant which are located along the Harvey A. Veniot Causeway. Their habitat will be destroyed with the construction of the pipeline, and will not likely recover.

8. The proponent’s public consultation was not adequate. I attended the open houses in New Glasgow and Pictou Landing which were both held prior to the new route of the pipe to Caribou Harbour being announced. The open houses were conducted on the basis of the pipe going into Pictou Harbour. No open houses were conducted following the announcement of the new route to Caribou, even though Dillon Consulting Limited promised me in two letters that they would hold additional open houses. Dillon also promised me in the same correspondence that they would release studies to the public as they became available. Very few studies were released to the public prior to the registration of the proposal. The correspondence from Dillon are included with Ecojustice’s submission to the proposal on behalf of Friends of the Northumberland Strait.

The open houses were crowded, loud, and not conducive to conversation, asking questions or obtaining information. They did not allow for meaningful discussion and it was difficult to engage the proponents. They did not have any means of taking notes of my concerns for future reference, consideration or documenting purposes.

The information provided at the open houses, in a subsequent mail out and advertisements represented that the project would include an oxygen delignification system which would improve the quality of the effluent. This system does not appear to be included in the proposal. There was no consultation by the proponent with the public following the announcement of the new route or the elimination of the oxygen delignification system from the project.

9. I am concerned that the environmental assessment is proceeding on the basis of a Class 1 environmental assessment which limits the time the public has to respond to the proposal. The proposal is almost 1700 pages long and takes a lot of time to read, analyse and reply. Because of the short length of time provided, I submit that the public consultation is not meaningful or as fulsome as it could otherwise be. This raises significant public policy concerns which are exacerbated by the lack of input the public will have to the additional information and studies the proponent has stated it will file at a later date. Public review and input is vitally important to the EA process but the public is not being this opportunity.

Missing Information

Aside from the many studies yet to be completed, the proposal is missing several pieces of information, as follows:

(a) The proposal states that the proponent's "Toxicity Prevention and Remediation Plan" will be used. This plan was not included in the proposal, and as such, it is not possible to determine whether it is complete or effective. Any reference to this plan and its use to mitigate or address any issue should not be considered.

(b) Page 28 of the proposal refers to a brochure attached to Appendix D. No such brochure is attached.

(c) Page 349 and 351 makes reference to "occurring in a context of previous disturbance". There is no information provided as to what the previous disturbances refers to.

(d) Page 460 sets out 10 known ship wrecks in the vicinity of the marine PFA/LAA. Attached is a list of 17 ship wrecks which I found after searching the Marine Heritage Database if the Maritime Museum of the Atlantic which is the same database the proponent claimed to have used.

(e) There appears to be information missing from Table 11.1-1 (page 535) as not all VEC's set out in section 8 of the proposal are summarized.

(f) Appendix Q (Bird Data) sets out data collected for the month of December only. As such, any data from migratory birds who left the area by December is not captured.

(g) The proposal fails to disclose that the location of the new on-site ETF will be located adjacent to Canso Chemicals which is a former chemical plant that has known deposits of mercury on its property. The proposal does not address the potential interaction that the presence of mercury will have on the construction and operation of the ETF and the environment.

(h) Although the proponent appears to imply that the lack of cooperation from fishers is the reason for the deficiencies in the proposal's information relating to commercial fishery in the area, it must be noted that area fishery information is contained in the most recent Environmental Effects Monitoring Study (EEM), which is attached as Appendix J of the proposal. The Receiving Waters Study completed by Stantec (attached as Appendix E2 of the proposal) sets out less information on the area fishery than the EEM study which was prepared prior to the Receiving Water Study. Also, during the open houses I attended in both New Glasgow and Pictou Landing hosted by the proponent as part of this environmental assessment process, I personally witnessed fishers and others drawing on a map the location of the fishery and explaining in detail the location of the area fishery to the proponent. The proponent appears to have disregarded this information as it has not been included in the proposal.

(i) A provision in the sign off sheet contained in the Receiving Water Study found in Appendix E3 of the proposal limits the usefulness of the study. The provision states, “The material in it [the Receiving Water Study] reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client.” Unless the contract between Stantec and KSH (the Client) is disclosed, it is not possible to understand the effect that the “scope, schedule and other limitations” imposed in the contract may have had on the results of the Receiving Water Study. As such, the Receiving Water Study ought not to be relied upon in the review of the proposal.

(j) On page 336 of the proposal, the marine local assessment area (LAA) is said to consist of a corridor approximately 300 m wide, including an area of 300 m encircling the outfall. There is no explanation as to how this area was determined or developed. It appears to be an arbitrary area with no basis for its existence.

CONCLUSION

This proposal was submitted prematurely without proper study or consideration for the environment and the adverse effects of the proposal on the Northumberland Strait. On page 12 of the proposal, the proponent admits that “due to EA Registration submission timing, the study period did not facilitate full biological field assessments for the current proposed transmission pipeline corridor”, and “...it was not possible to conduct field work in the new pipeline corridor or marine environment in order to inform this EA Registration.” The time constraints were created and were self imposed by the proponent. They could have chosen to complete the required studies and then file the proposal. Failure by the proponent to do so, and acceptance by the minister of this tactic if the proposal is approved, sets a very dangerous precedent for future EA registrations. It would convey the message that EA registrations do not need to be complete at the time of registration. Instead, a proponent can file an incomplete EA, receive approval, and then complete important studies. These studies would be filed without public review and input which would eliminate a vital component of an EA. This is not acceptable and is against public policy and violates procedural fairness.

I suggest that the proposal ought not to have been accepted for registration because it was not complete. Regulations 9(1A) made pursuant to the *Environment Act* states that the proponent must submit, “environmental baseline information”. This was not included in the proposal.

To protect the integrity of the EA process in Nova Scotia, this proposal must be rejected. The proponent must start the process from the beginning once it has gathered the required environmental baseline information and all studies required to properly review it’s proposal. The precautionary principle, set out in section 2(b)(ii) of the Environment Act, ought to be followed. It states,

“(ii) the precautionary principle will be used in decision making so that where there are threats of serious or irreversible damage, the lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.”

The environmental effects which would occur as a result of the proposal cannot be mitigated.

The proposal suggests that fishers can be compensated and therefore mitigation will be served. Money cannot address the harm that this project will bring because there is more than monetary or commercial issues at play. Money cannot compensate for the loss of a beloved beach or shoreline. Money cannot compensate for the loss of peace and enjoyment of a day on the strait with family and friends. Money cannot compensate future generations of fishers who want to fish the pristine waters of the strait. Money cannot compensate a rural community who is dependent on the strait for its economic prosperity, social well being and mental health.

This project must be rejected because of the likelihood that it will cause adverse effects or environmental effects that cannot be mitigated.

Yours truly, /



Canadian Water Quality Guidelines for the Protection of Aquatic Life

TEMPERATURE (Marine)

Water temperature, along with salinity, is one of the most important physical factors affecting marine and estuarine organisms. Temperature affects almost every physical property of seawater. The ionization constant, surface tension, and latent heat of vaporization decrease in a near-linear fashion as temperature is raised. The compressibility, viscosity, and specific heat of water all decrease nonlinearly with increasing temperature. Vapour pressure and thermal conductivity, the speed of sound in seawater, its electrical conductivity, and osmotic pressure, however, increase in magnitude as temperature increases. The solubility of gases, such as nitrogen, hydrogen, carbon dioxide, and oxygen, in contrast, all decrease as water temperatures rise (Cox 1965; Houston 1982).

Temperatures in the Canadian Pacific and Atlantic coastal and estuarine waters vary considerably depending on location, depth, freshwater inputs, extent of ice formation, upwellings, and currents (Dera 1992). For both coasts there is a pronounced seasonal variability in nearshore surface temperatures. Temperature measurements along the Canadian Atlantic coast have shown that winter water temperatures often range between -2 and 6°C , while summer temperatures vary between 7 and 18°C (Petrie and Jordon 1993). In the Straits of Georgia and Juan de Fuca, along the Canadian Pacific coast, winter temperatures between 5 and 8°C have been measured, while summer temperatures have been between 12 and 15°C (Thomson 1981). These general water temperature ranges are often exceeded in localized areas, such as certain fjords in British Columbia (e.g., Pendrell or Hotham Sound), where summer stratification has caused surface temperatures to exceed 20°C (Valiela 1979; Thomson 1981). Temperatures in the Arctic Ocean also exhibit geographical, seasonal, and annual variations, but fluctuations are smaller than those experienced in the Pacific or Atlantic Canadian coastal waters. In areas with drifting ice, surface waters usually remain at about -1.8°C , year-round. In the summer, ice-free areas may reach temperatures that rise several degrees above 0°C (Heimdal 1989). In northern Baffin Bay, average monthly temperatures over a 2-year period changed only marginally from a low of -1.53°C to a high of 0.19°C (Ross 1991). Ice and water transport patterns, winter air temperatures, and freshwater inputs can contribute to considerable local variability in recorded Arctic marine water temperatures (Drinkwater 1986; Prinsenberg 1986; Hopky et al. 1990).

Most of the human activities that affect the temperatures of marine and estuarine waters in Canada are associated with the release of waste heat. The major sources of these inputs include the processes of the chemical, petrochemical, and pulp and paper industries; municipal sewage; and thermal generating stations (Swiss 1984). Thermal generating stations account for over 75% of the total heat discharged into the marine environment. For example, the six thermal stations in Nova Scotia have been observed to raise the temperature of their effluent between 6.1 and 14.4°C over natural levels (Swiss 1984).

Other disturbances of aquatic temperature regimes may be related to the physical alteration of a water body. For instance, such processes as river diversions, water withdrawals from coastal areas, retaining walls in estuaries, large jetties, breakwaters, and causeways in coastal areas may significantly alter water temperatures. The construction of a tidal barrage in the upper regions of the Bay of Fundy, for example, increased the local tidal range and resulted in an overall lowering of the area's surface sea temperatures (Greenberg 1984).

Biological Effects

Summary

Temperature affects many chemical and biological processes. Chemical equilibrium constants, solubilities, and the rates of chemical reactions are temperature-dependent (Whitehouse 1984). Most marine and estuarine organisms are poikilotherms (i.e., cannot regulate their internal temperatures). As a result, biological processes, such as photosynthetic and respiration rates, spawning, uptake of toxic substances, and behavioural patterns of organisms, are all responsive to changes in temperature (Strickland 1965; Houston 1982; Aiken and Waddy 1990).

Kinne (1963) conducted a comprehensive review of the effects of water temperature on marine and brackish water animals. The results of this review indicated that biological processes may be greatly affected by water temperature fluctuations, gradients, ranges, and averages, as well as by the frequency and intensity of changes, duration of patterns, and accumulated heat units. Most marine and estuarine species, or populations within species, have characteristic tolerable temperature ranges

that include specific high and low lethal temperatures. Eurythermal species, i.e., species that can tolerate wide ranges of temperatures, are characteristic of aquatic environments with fluctuating temperatures. Stenothermal species, i.e., species that can only exist in a narrow range of temperatures, are characteristic of environments with near-constant temperatures. Gradual water temperature changes are usually better tolerated by all species than sudden changes (Kinne 1963).

Many marine and estuarine organisms can adjust to alterations in ambient water temperatures through an array of biological responses. This process, termed acclimation, can include behavioural, morphological, physiological, or biochemical responses. The length, frequency, and severity of exposure, as well as thermal history, are all-important determinants of an individual organism's response to temperature changes (Fry 1971; Hochachka and Somero 1971; Thompson and Newell 1985).

Potential effects of extremely low water temperatures on aquatic organisms include insufficient integration of nervous and metabolic processes, insufficient rates of energy liberation, changes in water and mineral balance, increase in osmoconcentration resulting from extracellular freezing followed by the dehydration of cells, liquefaction of cortical protoplasm, and gelation of the cell interior (Kinne 1963). Many species of marine fish have body fluids with lower osmotic pressure than seawater, causing such species to freeze at temperatures above the freezing point of seawater. Most species of marine fish avoid freezing by either avoiding ice-laden seawater and/or by increasing the osmotic concentration of their blood (DeVries 1971).

The effects of extremely high temperatures include insufficient supply of oxygen, failures in process integration, desiccation (intertidal organisms), enzyme inactivation, change in lipid state, increase in protoplasmic viscosity, increase in cell membrane permeability, protein denaturation, and release of toxic substances from damaged cells. Death can result from exposure to either extremely high or extremely low water temperatures (Kinne 1963).

Water temperature changes that are not lethal can produce a wide variety of significant sublethal effects. For example, temperature changes can significantly affect photosynthesis; respiration; susceptibility to disease; osmoregulation; uptake of pollutants; susceptibility to the toxic effects of pollutants; various behavioural patterns, including physical activity, reproduction, feeding, growth, migration, distribution, intra- and inter-specific competition, predator-prey relationships, community composition, and parasite-host relationships; and many other biological processes (Kinne 1963). Selected

examples of some water temperature effects in marine and estuarine ecosystems follow. Wherever possible, examples dealing with Canadian marine or estuarine systems were selected.

Specific Effects

Lüning and Freshwater (1988) studied the water temperature tolerance (-1.5–30°C) of marine algae (49 species) and seagrass (two species) near Vancouver Island. All species studied showed high levels of cold tolerance, with all surviving at 0°C and only six species dying at -1.5°C. Heat tolerance was much more variable; most subtidal species showed survival limits lower than 20°C; intertidal species survived at higher ranges of 20–28°C. Only one species, the seagrass *Zostera marina*, survived at 30°C. The authors characterized the northeast Pacific seaweeds as "cold-stenothermal", indicating a narrow range of temperature tolerance at the low end of the range of global marine temperatures.

Different organisms will exhibit different productivity levels at a given water temperature range. In Newfoundland coastal waters, Pomeroy and Deibel (1986) measured low levels of bacterial growth and respiration during the spring phytoplankton bloom, when surface temperatures were 1–2°C. It was suggested that in very cold environments, low bacterial activity (i.e., decomposition) during a period of high primary production could result in greater food availability for herbivores, thereby enhancing secondary production. Temperature-related control of bacterial activity may therefore be important in influencing production at higher trophic levels (Pomeroy and Deibel 1986; Pomeroy et al. 1991).

Water temperature plays a limiting role on the feeding and recruitment success of fish and crustacean larvae. The eggs of the walleye pollock (*Theragra chalcogramma*) in the Bering Sea generally hatch at temperatures ranging between 3 and 6°C, and the larvae feed on copepod nauplii. It was found that the larvae reared at 5.5°C were more successful at capturing copepod nauplii when the prey was at low concentrations, than the larval fish cohorts reared at 3°C. Conversely, larvae hatching at 5°C required 8% more calories than those hatching at 3°C (Paul 1983 and references therein). Paul and Nunes (1983) reported that northern pink shrimp larvae (*Pandalus borealis*) that hatched during a warm year (i.e., at 6°C) required 63% more calories to meet their metabolic requirements than larvae of the same weight that hatched in a cooler year (i.e., at 3°C). If this increased metabolic requirement were to exceed their ability to find and ingest food, the survival of that year's recruits could be compromised.

Increasing water temperature generally causes increases in the respiratory rates of aquatic animals and vascular and nonvascular plants (Kinne 1963; Dawson 1966). Beyond a given temperature, thermal stress is induced (Kinne 1963; Paul and Nunes 1983; Paul 1986; Paul et al. 1988). As respiratory rates increase, so do the organism's metabolic energy needs (feeding or photosynthesis). This relationship has important implications for the overall productivity and survival of marine and estuarine organisms that thrive in habitats with varying temperature regimes. Commercially important Pacific fish species were investigated for their metabolic oxygen requirement. In the linear portion of the oxygen consumption-temperature relationship, the nonfeeding metabolic requirement increased by 11%, 7–12%, 9%, and 18% per °C for Pacific cod, Atlantic cod, saffron cod, and juvenile walleye pollock, respectively (Paul 1986; Paul et al. 1988, 1990, and references therein).

Water temperature may also affect the reproductive capacity of marine organisms. Tanasichuk and Ware (1987) found that for Pacific herring the mean sea temperature in overwintering habitats during the three months before spawning (December to March) best accounted for variations in size-specific fecundity. The range in mean monthly sea surface temperature during the three months before spawning for the five years studied was 5.6–8.1°C. This range is relatively narrow, considering that the data purposely included one year that was very strongly influenced by an El Niño episode, and that herring came from seven sites extending close to 700 km along a north-south axis (Tanasichuk and Ware 1987).

All the relationships previously described demonstrate that relatively small changes in the extent and timing of temperature phenomena in high-latitude coastal waters can significantly alter biological processes.

Temperature and Toxic Substances

In general, the sensitivity of aquatic organisms to toxic substances increases with increasing water temperature (Cairns et al. 1975). The interactions between temperature and toxicity, however, are very complex because temperature generally affects the chemistry and availability of toxic substances, the survival and function of organisms, and the responses of organisms to toxicants. In water, ammonia exists in two forms, a non-ionic species (NH_3) and an ionic species (NH_4^+). The toxicity of ammonia to aquatic organisms is largely determined by the concentration of the non-ionic species, which is partly temperature dependent. A decrease in temperature will

lead to an increase in the proportion of NH_3 in water (Whitfield 1974; Miller et al. 1990).

Some criteria or guideline documents state different maximum or average toxicant concentrations allowed or recommended for different temperatures. The British Columbia ambient water quality criteria for ammonia for the protection of marine life (Nordin 1992, adopted from USEPA 1989) give maximum and average concentrations of total ammonia nitrogen that vary with water temperature.

According to Voyer and Modica (1990), insufficient data exist to permit the development of relationships between either water temperature or salinity and the toxicity of heavy metals in marine water. However, the authors also stated that evidence is available that indicates that survival, bioconcentration, and sublethal effects of pollutants on estuarine organisms are often related to ambient salinity and temperature conditions. Generally, as water temperature increases, the rate of metabolic processes increases, resulting in enhanced uptake and toxicity of metals to marine and estuarine organisms (Phillips 1976; Waldichuk 1985; McLusky et al. 1986; Voyer and Modica 1990).

Interim Guideline

Human activities should not cause changes in ambient temperature of marine and estuarine waters to exceed $\pm 1^\circ\text{C}$ at any time, location, or depth. The natural temperature cycle characteristic of the site should not be altered in amplitude or frequency by human activities. The maximum rate of any human-induced temperature change should not exceed 0.5°C per hour (CCME 1996).

Rationale

Many biological processes that occur in marine and estuarine waters are sensitive to temperature changes. The interim guideline of $\pm 1^\circ\text{C}$ for induced temperature change is recommended to ensure that adverse effects on these processes are minimized. The variability of coastal and estuarine waters is such that this temperature alteration is probably a minor proportion of the total variability to which organisms are exposed in these environments. Furthermore, the recommended rate of temperature change of 0.5°C per hour, which is adopted from the Alaskan guideline for temperature (BNA 1986; State of Alaska 1989), should reduce the impact of sudden induced temperature changes on the Canadian marine environment.

Site-specific diurnal, seasonal, and annual water temperature regimes are intended to be maintained through the recommendations of the interim temperature guideline. In recognition of this intention, a clause, adapted from the USEPA (1986) and Alaskan (BNA 1986; State of Alaska 1989) guidelines, which calls for the preservation of the amplitude and frequency of ambient temperature cycles, has been included as part of the Canadian interim temperature guideline.

It is recognized that, in implementing the recommended interim guideline for temperature, allowance may be made for the existence of mixing zones. Definitions of mixing zones are generally site-specific and consider the requirements of the jurisdiction or jurisdictions responsible for a particular activity.

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For further scientific information, contact:

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Facsimile: (204) 945-7172
E-mail: spccme@chc.gov.mb.ca

Northern Pulp Effluent Leak NSE test results - samples taken June 11, 2014

The following test data was taken on June 11, 2014, after an effluent leak at Northern Pulp. The wetlands were the most affected by the leak, and the evidence shows that materials likely did not reach Melmerby Beach and other points downstream from where the leak occurred. **Definitions:** pg is picogram (one trillionth of a gram); ug is microgram (one millionth of a gram), and mg is milligram. ND = not detected. Dioxins and Furans (below the blue line) were compared to federal pulp and paper effluent regulations (PPER). Exceedances to the operating approval (blue) will be dealt with in accordance with the department's compliance model. It should be noted that despite BOD and TSS exceeding approval limits, results of toxicity testing determined the exceedances were non toxic. Dioxins and Furans were compared to PPER exceedances (red) and fall under the jurisdiction of Environment Canada.

Parameter	SW2 - Wetland at Indian Cross Point	SW3 - East River at point of release	SW 1 - Melmerby Beach	Approval Requirement	SW2- Wetland at Indian Cross Point	SW3 - East River at point of release
Biochemical Oxygen Demand (BOD)	88 mg/L	3.1 mg/L	ND	3960 kg/day	7920 kg/day*	279 kg/day*
Total Suspended Solids (TSS)	82 mg/L	65 mg/L	4.4 mg/L	4100 kg/day	7380 kg/day*	6850 kg/day*
pH	7	7.7	7.68	6 to 9		
Acute Toxicity	PASS	Lab error**	Lab error**	PASS		
Dioxins & Furans				PPER***		
2,3,7,8 - TCDD	ND	ND	ND			
1,2,3,7,8 - P ₅ CDD	ND	ND	ND			
1,2,3,4,7,8-H ₆ CDD	ND	ND	ND			
1,2,3,6,7,8-H ₆ CDD	ND	ND	ND			
1,2,3,7,8,9-H ₆ CDD	ND	ND	ND			
1,2,3,4,6,7,8-H ₇ CDD	17.5 pg/L	1.69 pg/L	ND			
OCDD	304 pg/L	21.0 pg/L	3.93 pg/L			
TCDD	ND	ND	ND			
P ₅ CDD	ND	ND	ND			
H ₆ CDD	6.37 pg/L	ND	ND			
H ₇ CDD	43.8 pg/L	3.32 pg/L	ND			

2,3,7,8-TCDF	ND	ND	ND			
Parameter	SW2 - Wetland at Indian Cross Point	SW3 - East River at point of release	SW1 - Melmerby Beach	Approval Requirement	SW2- Wetland at Indian Cross Point	SW3 - East River at point of release
Dioxins & Furans				PPER		
1,2,3,7,8-P ₅ CDF	ND	ND	ND			
1,2,3,4,7,8-H ₆ CDF	ND	ND	ND			
1,2,3,6,7,8-H ₆ CDF	ND	ND	ND			
2,3,4,6,7,8-H ₆ CDF	ND	ND	ND			
1,2,3,7,8,9-H ₆ CDF	ND	ND	ND			
1,2,3,4,6,7,8-H ₇ CDF	ND	ND	ND			
1,2,3,4,7,8,9-H ₇ CDF	ND	ND	ND			
TCDF	ND	ND	ND			
P ₅ CDF	ND	ND	ND			
H ₆ CDF	ND	ND	ND			
H ₇ CDF	3.58 pg/L	ND	ND			

*Calculated based on 90,000 cubic metres per day flow

**Lab used fresh water rather than marine species for testing. Samples had passed the acceptable hold period by time the lab discovered the error, however based on the fact samples at SW2 have higher concentrations of effluent than those at SW1 or SW3, it can be concluded that the effluent would have a reduced impact once diluted.

***PPER - Federal Pulp and Paper Effluent Regulations require dioxins and furans to be non-detectable. This is enforced by Environment Canada.



New ferries, new operators, part of proposed revamp of Maritime ferries



Proposal would see operator-owned ferries on the water

Kevin Yarr • CBC News • Posted: May 05, 2017 7:11 AM AT | Last Updated: May 5, 2017



The Confederation was left alone to serve the Northumberland Strait, offering limited sailings for most of last season. (Julia Cook/CBC)

A federal government proposal could see new operators for three ferry services in the Maritimes, new ferries, and big changes to the way the services operate.

The government made the announcement at the community centre in Belfast, in eastern P.E.I., Friday morning.

The affected services connect

- Wood Islands, P.E.I., and Caribou, N.S.
- Souris, P.E.I., and Îles de la Madeleine, Que.
- Digby, N.S., and Saint John, N.B.

"I am very pleased that the Government of Canada is seeking to move towards long-term contracts to provide stability and certainty in the communities of eastern Prince Edward Island, which in turn will stimulate our economy," said Cardigan MP Lawrence MacAulay in a news release.

MacAulay said the proposal opens up the contract process in a way it has never been before.

Northumberland Ferries, the current operators of the P.E.I. — Nova Scotia service, welcomed the announcement of a strong, long-term commitment in a news release sent out after the announcement.

"We are pleased, for our customers, our employees, and the communities we serve, that the Government of Canada is making a strong and long-term commitment to the Wood Islands/Caribou and Saint John/Digby ferry services," said Chairman and CEO Mark MacDonald in a statement.

New operating structure proposed

Before that announcement, in the early morning hours of Friday, the government posted a request for information from industry that outlined its plans.

Ottawa is looking to move away from the current model where it owns the ferries and leases them to the companies that operate the services. The proposal is for the operating companies to own the ferries and sign a long-term contract — perhaps as long as 20 years — to provide the service.



Long-term contracts will provide economic stability, says P.E.I. MP Lawrence MacAulay. (Adrian Wyld/Canadian Press)

The proposal is currently at a request for information stage, with the government seeking feedback from companies.

As it stands, the government plan would see at least of three of the four ferries on the three routes replaced within the next three years. Ottawa is offering up the *MV Fundy Rose*, which service the Saint John – Digby route. Purchased in 2015 for \$44.6 million, the *Fundy Rose* was built in 2000.

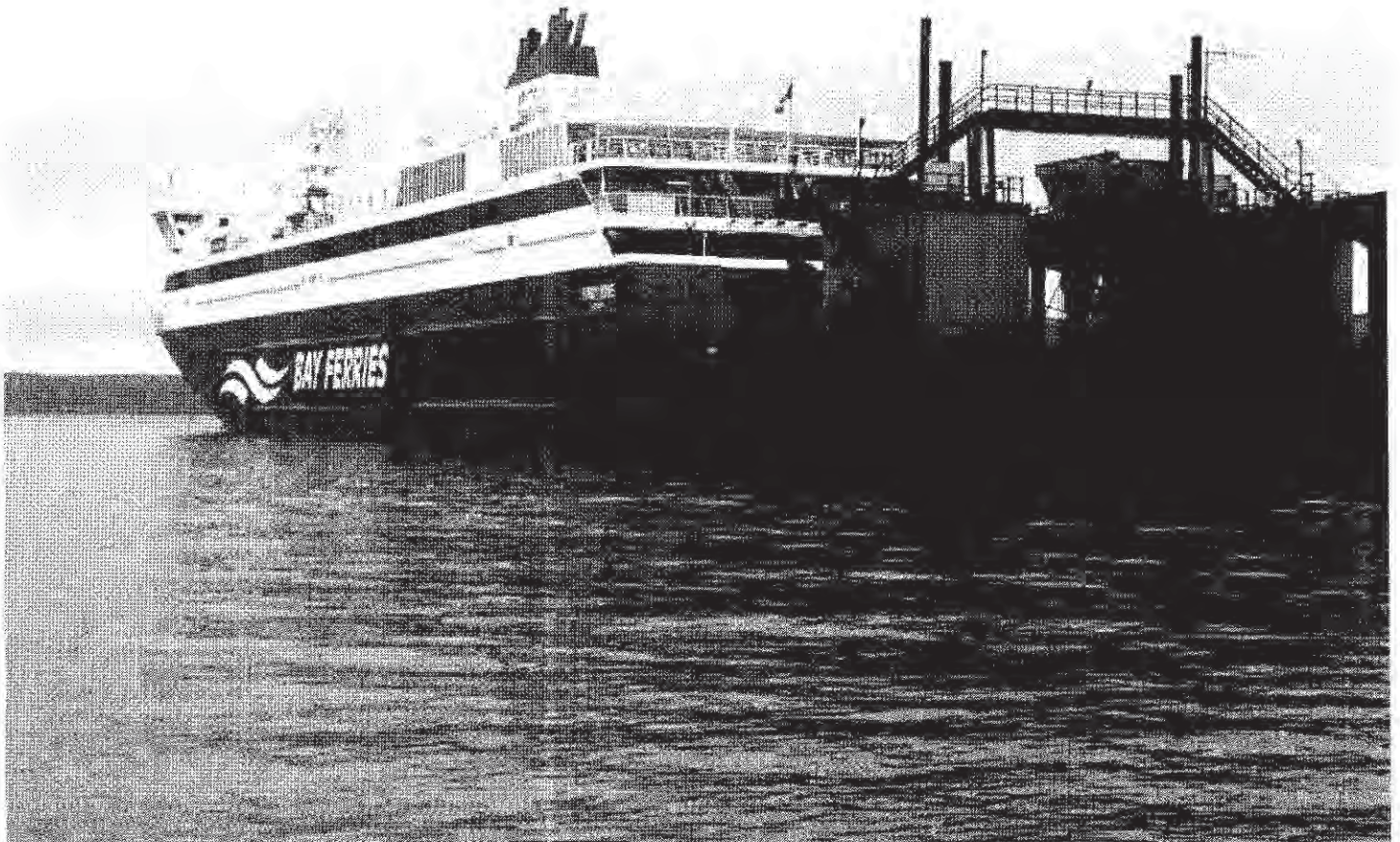
- **Fundy Rose ferry between Saint John and Digby unveiled**

The government says it is interested in leasing out the other ferries for a transition period of up to three years. Those ferries are

- *MV Confederation*: Built in 1992, serving the P.E.I.- N.S. route.
- *MV Holiday Island*: Built in 1971, serving the P.E.I.- N.S. route.
- *MV Madeleine*: Built in 1981, serving the Souris îles de la Madeleine route.

Vessels new to the routes would be no more than 10 years old.

The most recent federal budget included \$278 million over five years for the service, about \$18 million more than the previous funding agreement. In August Prime Minister Justin Trudeau said his government was committed to supplying the ferry service.



Ottawa is offering up the *MV Fundy Rose* as an option for the Digby – Saint John route with the new contract. (Roger Cosman/CBC News)

The government will hold an industry day for discussions on the proposals in Gatineau, Que., on June 2, and is scheduling one-on-one meetings with companies between July 10 and 21. It is accepting comments on the proposals until July 31.

Last summer the aging ferries connecting the Island and Nova Scotia struggled to stay on the water. The *Holiday Island* was in dry dock most of the season, leaving the *Confederation* alone to serve the route through the busy July-August season.

- **MORE P.E.I. NEWS | 'Our child shouldn't have laid there': Mother waits hours on roadside with dead son**
- **MORE P.E.I. NEWS | Online voting not ready for federal, provincial election: officials**

With files from Island Morning

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Northern Pulp Nova Scotia mill, in Abercrombie, Pictou County
 Source Emission Test Results for Winter 2015

The table below provides an overview of the results of the stack testing (source of the emissions) conducted on the Northern Pulp mill. The testing was conducted by Stantec Consulting Ltd., during the week of March 9, 2015.

Stack tests were taken at two locations: recovery boiler and power boiler

At the time of testing, stack emissions on the recovery boiler were 833 mg/Rm³, which is well above the stack emission limit of 375 mg/Rm³ as outlined in the company's industrial approval with the province. Emission levels for particulate on the power boiler were 155 mg/Rm³, which is above the approval limit of 150 mg/Rm³.

Legend:

does not meet limit
meets limit
unknown

POINT SOURCE	Stack Emission Limits		Source Emission Testing Results	
	AIR CONTAMINANT	TOTAL REDUCED SULPHUR (TRS)	AIR CONTAMINANT	TOTAL REDUCED SULPHUR (TRS)
Recovery Boiler	PARTICULATE 375 mg/Rm ³	15 ppm dv (any 4 hour rolling average)	PARTICULATE 833 mg/Rm ³	Not Tested (not required in Source Testing Section of the Approval)
Power Boiler	150 mg/Rm ³	n/a	155 mg/Rm ³	Not Tested (not required in Source Testing Section of the Approval)
REFERENCE SAMPLING METHOD	Environment Canada's EPS 1/RM/8	US EPA Method 16/16A/16B	Environment Canada's EPS 1/RM/8	US EPA Method 16/16A/16B

mg -	milligrams
Rm ³	reference cubic meter (ie. the volume of gas at 25 degrees Celsius (77°F) and 101.3 kilopascals (kPa) corrected to 11%
ppm dv -	parts per million dry volume
kg -	kilograms
adubmt -	reference production rate in air dried unbleached metric tonnes

Northern Pulp Nova Scotia mill, in Abercrombie, Pictou County
 Source Emission Test Results for Summer 2015

The table below provides an overview of the results of the stack testing (source of the emissions) conducted on the Northern Pulp mill. The testing was conducted by Stantec Consulting Ltd., during the period of September 15-18, 2015.

Stack tests were taken at two locations: recovery boiler and the power boiler.

At the time of testing, emissions of particulate matter from the recovery boiler was 3.9 mg/Rm³, which is well below the stack emission limit of 77 mg/Rm³ as outlined in the company's 2015 industrial approval. Results for the power boiler were 190 mg/Rm³ which is above the emission limit of 150mg/Rm³.

Legend:
 does not meet limit
 meets limit
 unknown

POINT SOURCE	Stack Emission Limits		Source Emission Testing Results	
	AIR CONTAMINANT	TOTAL REDUCED SULPHUR (TRS)	AIR CONTAMINANT	TOTAL REDUCED SULPHUR (TRS)
Recovery Boiler	PARTICULATE 77 mg/Rm ³	15 ppm dv (any 4 hour rolling average)	PARTICULATE 3.9 mg/Rm ³	
Lime Kiln	0.50 kg/adubmt	20 ppm dv (any 4 hour rolling average)	Not Tested (not required in this round of Source Testing under the Approval)	Not Tested (not required in this round of Source Testing under the Approval)

Smelt Dissolving Tank	0.50 kg/adubmt	n/a	Not Tested (not required in this round of Source Testing under the Approval)	Not Tested (not required in this round of Source Testing under the Approval)
Power Boiler	150 mg/Rm ³	n/a		
High Level Roof Vent	n/a	n/a		Not Tested (not required in this round of Source Testing under the Approval)
REFERENCE SAMPLING METHOD	Environment Canada's EPS 1/RM/8	US EPA Method 16/16A/16B	Environment Canada's EPS 1/RM/8	US EPA Method 16/16A/16B

mg -	milligrams
Rm ³ -	reference cubic meter (ie. The volume of gas at 25 degrees celsius (°C) and 101.3 kilopascals (kpa) corrected to 11% Oxygen)
ppm dv -	parts per million dry volume
kg -	kilograms
adubmt -	reference production rate in air dried unbleached metric tonnes

Marine Heritage Database

Results 1 to 18 of 18 from your search: carib

Vessel Name	Date of Wreck	Event	Location of Wreck
<input type="checkbox"/> Belle - 1875	1875-07-01	Foundered	Pictou Island, between Caribou Island and
<input type="checkbox"/> Bounty - 1887	1887-12-20	Stranded	Caribou Island
<input type="checkbox"/> Cape Breton - 1887	1887-11-07	Foundered	Caribou Island
<input type="checkbox"/> Ellen - 1875	1875-11-20	Stranded	Caribou Harbour, entrance
<input type="checkbox"/> Emelle - 1885	1885-04-11	Wrecked	Caribou Island
<input type="checkbox"/> Emma - 1870	1870-06-09	Stranded	Caribou Point
<input type="checkbox"/> Harriet - 1868	1868-10-17	Stranded	Caribou Island
<input type="checkbox"/> Hilda - 1886	1886-05-09	Stranded	Little Caribou Entrance
<input type="checkbox"/> Maggie - 1883	1883-11-17	Stranded	Caribou, off
<input type="checkbox"/> Mary Hart - 1875	1875-10-24	Stranded	Caribou Island Shoal, Pictou Harbour
<input type="checkbox"/> Ocean - 1875	1875-09-01	Stranded	Caribou Island
<input type="checkbox"/> Nancy - 1879	1879-10-19	Stranded	Caribou Island
<input type="checkbox"/> Nightengale - 1868	1868-11-21	Stranded	Caribou Island
<input type="checkbox"/> Shannon - 1868	1868-10-17	Stranded	Caribou Island
<input type="checkbox"/> Speed - 1878	1878-12-22	Stranded	Caribou Cove, Gut of Canso
<input type="checkbox"/> Trimmer - 1939	1939-05-24	Wrecked	Caribou River
<input type="checkbox"/> Union - 1910	1910-07-20	Stranded	Caribou Head
<input type="checkbox"/> Zaidée - 1896	1896-11-01	Stranded	Toney River, near Caribou

Page 1 of 1: 1

enter a search

select a search field

Vessel Name

Search

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp
Date: March 9, 2019 12:40:24 PM
Attachments: [letter - dad.docx](#)

Hello,

Attached is a letter concerning Northern Pulp.

Thank you.

Dear Minister Miller,

I am writing to you regarding Northern Pulps Replacement Effluent Treatment Facility Project.

My name is _____ and I live just outside on Pictou, Nova Scotia, in the small community of _____. I have lived in this area for all of my _____ years. I am a commercial fishing license holder, for _____ years fishing out of Toney River, Nova Scotia, and also fished in the area long before purchasing my own license. The threat of this new project impacts me and my family a great deal. Not only am I employed in the commercial fishery, but my father is also a commercial license holder and my brother, and son are both currently employed in the fishery. My family has been fishing in this area for many years and have depended on the Northumberland Strait for an income, but it is also a key to our way of life and culture. My family is not the only one with this sort of bloodline dependency and history with the fishery and the Strait. My community is full of people who depend on the Strait for survival. The Northumberland Strait is more than just a body of water, it is our life.

I wish to raise a couple points of concern with the project.

First, as a fisherman I am concerned, that the proposed effluent pipe will be a detriment to the local fisheries, including that of lobster, rock crab and herring. The proposed outfall location is premium breeding grounds for all of these fisheries, and are of grave importance to the local area, as well as the entire economy of Nova Scotia. I feel as though there should be a greater deal of importance placed on protecting these fisheries. The science provided in Northern Pulps proposal is outdated, being conducted in the 1960's. Our industry is under constant pressure to evolve and become more sustainable and improve our fishing methods as well as our conservancy methods. How can a large corporation, who is not even Canadian owned, come in and attempt to infiltrate our waters, and not be subject to more severe outside pressures to ensure that what they are doing is not only scientifically acceptable but also morally right. Just because they claim that the effluent technically passes whatever loose requirements imposed by the federal pulp and paper mill guidelines, does not mean that is morally right to be pumping anything into the ocean. All levels of government have been claiming that we need to protect the ocean, that we need to cut down on pollution and begin to care for our environment because we won't have it forever. How can someone say this but then consider pumping effluent full of toxins into the ocean. The Government can't have it both ways and are going to have to step up to the plate. Is big industry more important than the health and well being on not only the Environment and ecosystem of the Northumberland Strait, but as well as the health and well being of the people that live there. Nova Scotia is considered Canada's ocean playground, and that's for good reason, the province is surround by the ocean. But what happens if Northern Pulp wants to start pumping their effluent into that playground? No ones going to want to play there anymore.

A separate point I would like to bring up is the monitoring of the pipe and its wellbeing. My main point being that how will the pipe be monitored? They claim that the accidental release of effluent can occur. There is an example of this in the fall of 2018 when a ruptured pipe was

discovered by a passerby in the Pictou Landing First Nations area. How can Northern Pulp claim to monitor their systems when a pipe rupture was undetected on land, let alone if the pipe was buried in the sea floor. I feel as though this risk needs to be better assessed because the potential for effluent to leak throughout the pipeline is very high. This applies for both the sections, land and ocean. This can pose problems for the fisheries and the marine ecosystem in the marine environment, but just as big a problem on land as the pipe is running right through the town of Pictou's water shed. I am sure the residents of Pictou do not want any effluent in their drinking water. Risking these aspects seem to be a very great risk that Northern Pulp is willing to take. I feel as though if the effluent leaking and entering the environment is seen as a problem, why is the idea of pumping it into the Northumberland Strait seen as an acceptable means of disposing of effluent in the first place?

Finally, this entire process, with the timelines put forth in the entire process, is once big farce. Northern pulp has had 5 years, to put together this large report on the entire project. That's fine. Where I draw the problem is that we as a concerned public, have only a fraction of that time, to formulate any concerns and put them forth to the government. In fact, the time line for concerns is only 30 days. This to me is a gross miscalculation. It is a hardly fair that the public has so little time to critique and raise concerns on a project that could potentially have a lasting and detrimental impact on the entire Northumberland Strait region, including that in neighboring provinces of New Brunswick and Prince Edward Island. This raises an aside to my main point. That being that why is the Government of Nova Scotia the one to make the decision when the Northumberland Strait is a body of water the impacts three separate provinces. As a fisherman, everything I do is monitored and controlled by the federally department of fisheries and oceans. They control everything in the fishery, as a federal body. So why does this decision that has the potential to impact everything mentioned above, being made by a provincial government? This does not seem right. Especially when you take into consideration that the Government of Nova Scotia has funded the planning and design of this project, and as well has helped the Pulp Mill with monetary funding and aiding them over the years with extended boat harbor leases or example, so that they can continue their environmental racism uninterrupted. All this seems to lead to the conclusion the that Government of Nova Scotia is unable to make this decision with a clear and concise conscience and therefore should defer and have the choice put into the hands of the Federal Government so that a more thorough investigation and assessment can take place so that everything is out in the open and there will be no more secrets and fear in the community. Because right now there is fear and division. And all this could be fixed by the Government if they aid on the side of caution, and don't give into the Mill once again. Don't let them have their way anymore. This project should be a Federal issue. No more romance between Northern Pulp and the Provincial Government.

Restating the three reasons that I oppose this project,

- 1) Lack of sufficient research regarding the Fisheries
- 2) Lack of monitoring and potential disastrous leaks
- 3) An underhanded process that only helps Northern Pulp and the overlooking of the Nova Scotian Government that this is a Federal issue

These points are a handful of reasons that I believe this project should be handed over to the Federal Environment Minister. This entire project should be subject to extreme scrutiny and not be taken lightly. A decision that impacts three separate provinces and millions of people should have to be approved by simply a few days' worth of thinking and processing. I plead that the Federal Government be involved, and the that the Northumberland Strait be taken care of and not be put at risk.

Thank you

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Environmental Assessment Application
Date: March 9, 2019 12:43:23 PM
Attachments: [Northern Pulp submission.docx](#)

Attached is my response to the above EA

March 9, 2019

To: NS Department of Environment
Re: Northern Pulp Environmental Assessment
Attn: Hon. Margaret Miller
Dear Minister Miller,

I am writing in response to Northern Pulp's proposed Replacement Effluent Treatment Facility Project.

I have been a resident of the Town of Pictou I am retired from a career working in Recreation, Health Promotion, Tourism and Community Development at the municipal (Town of Pictou) and provincial (Government of NS) and the Northwest Territories in both Iqaluit and Yellowknife.

Throughout my career I have been dedicated to promoting and protecting natural spaces and parks for the enjoyment of citizens and for the sustainability of the environment for future generations. On a personal level I have been involved in the construction of trails in NS and I am an avid outdoor enthusiast specifically hiking and kayaking.

Whether it be in my career or personal life I have experienced numerous negative impacts as a result of the Northern Pulp operation at Abercrombie Point. To name a few:

- Decreased visitor numbers and cancellations of bookings by customers to our tourism sites/attractions/special events as a result of the putrid odour and smog coming from the mill.
- The inability to enjoy our own property and outdoors in general in the Town of Pictou and surrounding area again as a circumstance of the stench and smog emanating from the mill.
- Personal danger and harm; my wife and I had an experience kayaking at the mouth of Pictou Harbour when we had to put our kayaks ashore due to the blinding effect of the smog and the level of the toxicity burning our eyes. Not the type of experience anyone would expect when experiencing Canada's Ocean Playground.

The proposed effluent treatment facility does not rectify these concerns and in fact only serves to compound them and add additional threats to our environment and personal health. I am specifically concerned about the following:

A. Town of Pictou Watershed

As a citizen of the Town of Pictou I have long awaited improvement to the water quality in our community. A new water treatment facility was put into operation in 2018. The proposed route for effluent pipe is through and in proximity of the Town's protected watershed area. The Mill has had numerous breaks in the pipeline line which currently dumps the effluent into Boat Harbour. There is no confidence that Northern Pulp can prevent future spills nor put into place sufficient monitoring to detect spills and take action quick enough to prevent poisoning of the Town's water supply. Typically, past behaviour is an accurate indicator of future behaviour, that has certainly been the case with Northern Pulp and I suggest that this risk is not acceptable given their past record of spills. I should also note that the Town Water Shed feeds private well systems of residents living in the Municipality of Pictou County. A pipe carrying toxic waste through a watershed area is not acceptable.

B. Air Quality

Northern Pulp proposes to burn the sludge captured the newly proposed treatment process in their boilers. The levels of toxicity and odour will be worse.

I am not sure what the appropriate word is, perhaps "ironic", better yet "absurd" that the Town of Pictou has a Fireplace By-law passed in 2012 which in part deals with levels of smoke deemed to be acceptable, or not. An excerpt from the by-law is included below:

TOWN OF PICTOU

OUTDOOR FIRE BY-LAW

BE IT RESOLVED that this By-law, known as the Outdoor Fire By-law for the Town of Pictou be enacted effective this 30th day of May, 2012;

j. "Nuisance" means the causing of any smoke or other emission from any fire permitted or allowed under this By-law, or otherwise, that adversely affects the reasonable enjoyment by other persons of their property;

Surely, if this basic standard was applied to the fire, in this case, smoke from Northern Pulp stacks it would be classified a nuisance and shut down. The current standards for air quality in my opinion as a person who lives in this area is not acceptable. It is not fair or reasonable to expect any person, by any standard, to endure this poor air quality. Imagine this level of toxicity, smog and stench in any other jurisdiction in NS. For example, on the Halifax waterfront, it would not be acceptable there and Pictou residents and visitors should not be expected to endure it any longer.

The Town of Pictou uses the Ringelmann Visual Chart to assess compliance to the by-law and fines can be levied if smoke is rated at Ringelmann level 1 or 20% opacity which smoke emitted from Northern Pulp does not meet frequently on days of high humidity in our community, thereby removing our ability to enjoy the most basic air quality standards. The accompanying odour on these days is by any reasonable standard unbearable and not in sync with today's norms, especially in an era when most workplaces and communities are enforcing, for example, no scent policies and programs.

3. No Public Confidence

The public is again being asked to believe the science and engineering for the new treatment facility. In their matrix table “ E.1.1-1 Summary of Significance of Project related Residual Environmental Effects “ the mill claims that there is absolutely No Significant expected impact on all of the environmental areas they are required to address. The public has no confidence in this corporate claim especially based on past history of effluent pipe spills, non-compliance to air quality standards and the like.

4. Dredging and Federal Regulations

On page 56 of the EA document Northern Pulp makes a very cursory reference to necessary approvals for the dredging required to put the pipe in the Northumberland Strait. It is not satisfactory that Northern Pulp be considered for EA approval at a provincial level when they have not submitted their dredging plan for approval for by the Federal Government. There are a number of Federal regulations which impact on dredging permits including but not restricted to: Fisheries Act, Navigation Protection Act, and the Canadian Environment Assessment Act. Northern Pulp should be required to pass these approvals for dredging prior to consideration for approval by the NS Dept. of Environment. In particular, as in the case with dredging in the St. Lawrence Seaway which was subject to the aforementioned Federal Regulations, Northern Pulp has no way of ensuring that toxins, contaminants present from past industrial activities in the Ferry Terminal area at Caribou would not be disturbed as a result of the pipe installation.

In conclusion I ask the Minister to reject Northern Pulp’s request for EA approval for a number of reasons as stated above as well as the following:

- The time permitted to review their 1700 page application is not fair.
- Northern Pulp made changes to the proposed pipe route and did not hold additional public consultations to present the rationale for this change and to seek input from the public and stakeholder groups.
- They make a number of claims throughout the report where “they don’t expect” any harm to be done. This is does not demonstrate confidence in their own ability to implement a safe and reliable project.
- Northern Pulp should be required to submit to a more thorough environmental assessment through the Canadian Environmental Assessment Agency due to the complex nature of their proposal, anticipated harm to the environment, the local economy, and quality of life of residents who live in proximity to the mill.
- It does not make sense that regardless of the treatment process proposed that we would put the same substance that has gone into Boat Harbour and that will cost at least 200 million dollars to mitigate, into another body of water.

Respectfully submitted,

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp
Date: March 9, 2019 12:44:08 PM
Attachments: [Letter grampy.docx](#)

Hello,

Attached is a letter from My Grandfather regarding Northern Pulp.

Thank you

Dear Minister Miller,

I am writing to you regarding Northern Pulps Replacement Effluent Treatment Facility Project.

My name is . I live in Toney River, Nova Scotia. I have been a commercial fisherman in the Pictou area for 40 years now, and have both my sons employed in the fishery, one of whom is a captain, and the other that I employ. I also have a grandson employed in the Fisheries. So, to say that the Northumberland Strait and the local fishing industries is not gravely important to my family would be a substantial understatement. Fishing has been a way of life in our family for many years, since before I was born, and will continue well into the future, so long as we protect the Northumberland Strait and all the resources that live in it. This is why I write to you today, to demonstrate my objection and involvement with the project. I want to express concern for my children, their children and my family's future well being and wish to make sure that they are taken care of and their way of life is not jeopardized in the future.

I wish to raise three points of concern with the project.

First, as a fisherman I am concerned, that the proposed effluent pipe will be a detriment to the local fisheries, including that of lobster, rock crab and herring. The proposed outfall location is premium breeding grounds for all of these fisheries, and are of grave importance to the local area, as well as the entire economy of Nova Scotia. I feel as though there should be a greater deal of importance placed on protecting these fisheries. The science provided in Northern Pulps proposal is outdated, being conducted in the 1960's. Our industry is under constant pressure to evolve and become more sustainable and improve our fishing methods as well as our conservancy methods. How can a large corporation, who is not even Canadian owned, come in and attempt to infiltrate our waters, and not be subject to more severe outside pressures to ensure that what they are doing is not only scientifically acceptable but also morally right. Just because they claim that the effluent technically passes whatever loose requirements imposed by the 5555, does not mean that is morally right to be pumping anything into the ocean. All levels of government have been claiming that we need to protect the ocean, that we need to cut down on pollution and begin to care for our environment because we won't have it forever. How can someone say this but then consider pumping effluent full of toxins into the ocean. The Government can't have it both ways and are going to have to step up to the plate. Is big industry more important than the health and well being on not only the Environment and ecosystem of the Northumberland Strait, but as well as the health and well being of the people that live there. Nova Scotia is considered Canada's ocean playground, and that's for good reason, the province is surrounded by the ocean. But what happens if Northern Pulp wants to start pumping their effluent into that playground? No ones going to want to play there anymore.

A separate point I would like to bring up is the monitoring of the pipe and its wellbeing. My main point being that how will the pipe be monitored? They claim that the accidental release of effluent can occur. There is an example of this in the fall of 2018 when a ruptured pipe was

discovered by a passerby in the Pictou Landing First Nations area. How can Northern Pulp claim to monitor their systems when a pipe rupture was undetected on land, let alone if the pipe was buried in the sea floor. I feel as though this risk needs to be better assessed because the potential for effluent to leak throughout the pipeline is very high. This applies for both the sections, land and ocean. This can pose problems for the fisheries and the marine ecosystem in the marine environment, but just as big a problem on land as the pipe is running right through the town of Pictou's water shed. I am sure the residents of Pictou do not want any effluent in their drinking water. Risking these aspects seem to be a very great risk that Northern Pulp is willing to take. I feel as though if the effluent leaking and entering the environment is seen as a problem, why is the idea of pumping it into the Northumberland Strait seen as an acceptable means of disposing of effluent in the first place?

Finally, this entire process, with the timelines put forth in the entire process, is once big farce. Northern pulp has had 5 years, to put together this large report on the entire project. That's fine. Where I draw the problem is that we as a concerned public, have only a fraction of that time, to formulate any concerns and put them forth to the government. In fact, the time line for concerns is only 30 days. This to me is a gross miscalculation. It is a hardly fair that the public has so little time to critique and raise concerns on a project that could potentially have a lasting and detrimental impact on the entire Northumberland Strait region, including that in neighboring provinces of New Brunswick and Prince Edward Island. This raises an aside to my main point. That being that why is the Government of Nova Scotia the one to make the decision when the Northumberland Strait is a body of water the impacts three separate provinces. As a fisherman, everything I do is monitored and controlled by the federally department of fisheries and oceans. They control everything in the fishery, as a federal body. So why does this decision that has the potential to impact everything mentioned above, being made by a provincial government? This does not seem right. Especially when you take into consideration that the Government of Nova Scotia has funded the planning and design of this project, and as well has helped the Pulp Mill with monetary funding and aiding them over the years with extended boat harbor leases or example, so that they can continue their environmental racism uninterrupted. All this seems to lead to the conclusion the that Government of Nova Scotia is unable to make this decision with a clear and concise conscience and therefore should defer and have the choice put into the hands of the Federal Government so that a more thorough investigation and assessment can take place so that everything is out in the open and there will be no more secrets and fear in the community. Because right now there is fear and division. And all this could be fixed by the Government if they aid on the side of caution, and don't give into the Mill once again. Don't let them have their way anymore. This project should be a Federal issue. No more romance between Northern Pulp and the Provincial Government.

Restating the three reasons that I oppose this project,

- 1) Lack of sufficient research regarding the Fisheries
- 2) Lack of monitoring and potential disastrous leaks
- 3) An underhanded process that only helps Northern Pulp and the overlooking of the Nova Scotian Government that this is a Federal issue

These points are a handful of reasons that I believe this project should be handed over to the Federal Environment Minister. This entire project should be subject to extreme scrutiny and not be taken lightly. A decision that impacts three separate provinces and millions of people should have to be approved by simply a few days' worth of thinking and processing. I plead that the Federal Government be involved, and the that the Northumberland Strait be taken care of and not be put at risk.

Thank you

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp ETF Project Concern
Date: March 9, 2019 12:46:55 PM

Dear Honourable Minister Miller:

I am writing in response to Northern Pulp's environmental assessment for their new effluent treatment facility that would discharge up to 85 million litres daily of treated pulp effluent daily and into the Northumberland Strait.

Our family has had cottages on Moodie Cove since the early 1900's, long before the mill compromised air quality and before its effluent hugged the shoreline along Lighthouse Beach. My deep appreciation for the Northumberland Strait's beauty and clear water is what keeps our family coming back.

As a police officer with 30 years of experience, the history of Northern Pulp's parent companies is of particular concern to me. Northern Pulp is owned by Paper Excellence a subsidiary of Indonesian conglomerate, Sinar Mas. Sinar Mas is owned by the Widjaya family, one of the wealthiest families in Indonesia. Their businesses are responsible for deforestation of the Indonesian rainforest; contributing to hazardous level of smog in Singapore and Malaysia; defaulting on a \$14 billion loan; greenwashing their companies; and bribing government officials.

As Northern Pulp wraps up 50 years of deceit and environmental racism with Pictou Landing First Nation, they say they are ready to start a new and improved environmental legacy in Nova Scotia. Sinar Mas does not have their own country's best interests at heart. How are we to believe that their environmental practices in Nova Scotia will ever be any better. Below are a number of examples of questionable practices and concerns by Sinar Mas, parent company of Northern Pulp.

1. Asia Pulp and Paper makes Corporate Criminal List top 10

<https://globalexchange.org/2018/11/23/ten-top-corporate-criminals-of-2018>

In 2018 Asia Pulp and Paper was listed in the top ten of corporate offenders on the Global Exchange list. Global exchange is an international human rights organization dedicated to promoting social, economic and environmental justice around the world. Each year it releases its top corporate criminal list too highlight some of the world's corporate worst-of-the-worst on issues like violations of human rights and workers' rights, environmental destruction, war profiteering, and tax evasion and other white-collar corporate crime, just to name a few.

Asia Pulp and Paper made Global Exchange's 2018 "10 Top Corporate Criminal" list for continued destruction of the Indonesian rainforest and peatlands and attempting to "greenwash" its image for the global market

2. Executives with Sinar Mas arrested in Bribery scandal in Indonesia

An October 2018 article in Mongabay (<https://news.mongabay.com/2018/10/palm-oil-executives-arrested-in-bribery-scandal-in-indonesia/>) details the arrest of three Sinar Mas executives *after an employee was caught bribing politicians to kill an inquiry into water pollution and plantation licenses in Borneo*. Two of the executives were employed with a palm oil company which falls under Sinar Mas and according to the Mongabay article was located *near Lake Sembuluh in Seruyan district, in the Bornean province of Central Kalimantan. The lake is ringed by oil palm plantations and mills and has become severely polluted, with residents complaining of itchy skin after swimming in its waters and the collapse of fish stocks.*

PT Binasawit Abadi Pratama, was a smaller company the executives worked for operating near the lake.

A tip was received by investigators about a *planned meeting in Jakarta between Binasawit representatives and provincial legislators, during which the bribery was supposed to take place*. Further investigation revealed that there were problems with Binasawit permits and that *Sinar Mas wanted to pay off the legislators not only to kill the inquiry into water pollution but also to tell the media that Binasawit's permits were in order*. At the conclusion of the investigation two executives from Sinar Mas were charged.

3. Greenpeace Slams AP&P over links to Deforestation

<https://www.greenpeace.org/usa/news/greenpeace-slams-app-sinar-mas-links-deforestation-ends-engagement-company/>

An article by Greenpeace International in May of 2018 calls out Asia Pulp and Paper (AP&P) over its deforestation practices in Asia and indicated that Greenpeace has ended all engagement with the company. Through *mapping analysis by Greenpeace International* it has been revealed that *almost 8,000 ha of forest and peatland has been cleared since 2013 in two concessions which are, through ownership, linked to APP and its parent company the Sinar Mas Group*. Greenpeace has put these allegations to APP/Sinar Mas. *The group failed to provide a credible response or to take meaningful action. As a result, Greenpeace has ended all further engagement with APP/Sinar Mas.*

In 2013 APP had adopted a Forestry Conservation Policy (FCP) and had *committed to end forest clearance within its own and suppliers' concessions, protect remaining forests in these areas, improve management of peatland and work with communities to resolve social conflicts*. Greenpeace had been advising and inputting into the FCP, however when it was able to show the deforestation of nearly 8000 hectares through satellite imagery and company deeds, it ended its relationship with APP stating that *this new evidence tells us that APP/Sinar Mas is not genuinely serious about stopping deforestation in Indonesia*. Greenpeace further called upon customers of APP to demand they end their deforestation practices and that *if APP and the Sinar Mas Group do not immediately comply, then all customers should cancel contracts and walk away.*

4. Behind-the-scenes ties and significant influence over wood suppliers linked to fires and deforestation in Indonesia.

<https://www.seattletimes.com/business/ap-exclusive-pulp-giants-makeover-obscures-supplier-ties/>

According to an AP exclusive published in the Seattle Times, December 19, 2017, Sinar Mas, known by its international trade name, Asia Pulp and Paper, one of the world's largest paper producers was attempting to "Greenwash" its image for the global market. In the article it states that Asia Pulp and Paper (APP) *has insisted in company publications, public events and to the media that most of the companies that supply it with wood are "independent," not owned by it or in other ways affiliated with it*. The AP reviewed over 1000 pages of company records and determined that 10 individuals owned these "independent" wood suppliers, and *that six are employees of the Sinar Mas group and two are former employees, one with links to the Widjaja family, which owns Sinar Mas. Several work in the finance department of Sinar Mas Forestry*. According to the article, Sinar Mas had pledged in 2013 to stop deforestation however the investigation found that *a company owned by two employees of Sinar Mas Forestry has been cutting down tropical forest on the island of Borneo since 2014.*

The AP was able to find that 27 so called independent wood suppliers had links to Sinar Mas even though the company had told the outside world that they were independent. They were able to identify some by *matching biographical details in the documents, including birth dates, to information in social media profiles, news reports, forestry industry documents and other sources.*

The article goes on to describe that on top of its pledge to stop deforestation in 2013, that Sinar Mas made another *pledge to gain prior and informed consent of local communities for new plantations*, but in spite of this, *Sinar Mas is pressing ahead with plans to turn 66,000 hectares (163,000 acres) of state land in the Bangka Belitung island chain off Sumatra into industrial forestry plantations despite substantial opposition from locals. The move puts the company on a collision course with villages that farm on the land and*

which some 100,000 people call home.

5. Defaulted on \$14 billion worth of bonds and loans in 2001

In the mid-1990s Asia Pulp and Paper (APP) embarked on an aggressive expansion strategy to turn their pulp and paper operations into a global player. Billions of dollars were required to fund the intended expansion. According to the Bulls and Bears Blog, *the company commenced a global drive for funds and managed to issue billions of dollars' worth of bonds starting 1994, with the help of the eager Wall Street investment banks, and a story that sold with investors: an emerging market blue-chip, with competitive advantage in fast-growing Indonesian hardwood, and operating in low-cost Indonesia while collecting revenue in dependable US currency.* (<http://stocktaleslot.blogspot.com/2005/11/asia-pulp-paper-debt-default.html>).

Several years later, after a down turn in global paper prices , APP were unable to meet their debt payments on bonds , loans and trade payables and according to Wikipedia, *in 2001, [Asia Pulp & Paper \(APP\)](#), the subsidiary of Sinar Mas Group, called a standstill on \$14 billion worth of bonds and loans and stopped repaying its debt, including interest payments, in what is still the largest default to foreign investors in Asian market history. This included about US\$6.7 billion of dollar notes, the biggest missed bond obligation by an Asian company to date,* (The Strait Times, Published Apr 28, 2015, <https://www.straitstimes.com/business/worst-asian-default-forgiven-as-indonesia-billionaire-sells-debt>).

The consequences for the Widjaya family were limited and as the ultimate owners of APP, *there was no forced pledging of their personal assets, nor any injection of assets to prop up the company for debt restructuring. The family and their associates were still left as the operational managers after the whole debacle.* (Bulls and Bears Blog). The Widjaya family was also the owner of Bank Internasional Indonesia, before it was taken over and bailed out by the government in 2001 because it was unable to force Sinar Mas and other borrowers to repay their debts, and that, *more than half of the bank's loans were made to Sinar Mas companies, violating rules on inter-group lending.* (Bloomberg Billionaire Index, Overview Eka Widjaya)

The Widjaya family business went on to recover from this debt default and expanded their properties in Indonesia, Singapore and China and according to the Bloomberg Billionaires Index , Eka Widjaya , the founder of the family business was listed in 2017 with a net worth of \$ 8.1 Billion.

Minister Miller, our natural resources deserve better than Sinar Mas. Nova Scotia deserves better. Pictou County deserves better. I am asking you to reject Northern Pulp's EA proposal. Their EA does not prove that their project will not cause adverse effects to the environment, and given their parent company's history of deceit and environmental destruction, there is no evidence to show that Northern Pulp has any intention of starting an improved environmental legacy here in Nova Scotia.

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Effluent Treatment Facility Project Concern
Date: March 9, 2019 1:03:39 PM

Dear Honourable Minister Miller:

I am writing in response to Northern Pulp's environmental assessment for their new effluent treatment facility that would discharge upwards of 85 million litres of treated pulp effluent daily into the delicate ecosystem of the Northumberland Strait.

My husband and I have a cottage on Moodie Cove, Pictou Landing. As recreational water enthusiasts, we have spent our summers exploring the Strait and observing its diverse marine life. The Caribou Harbour area is one of our favourite areas to explore. We travel from the Pictou Landing Marina, make our way around the PEI Ferry markers and anchor off Munroe's Island. Here we will walk the beaches, swim and snorkel. While snorkelling, we have noticed the Caribou area is rich in marine life and is home to large populations of juvenile fish and crustaceans.

Concern: Northern Pulp's Community Liaison Committee - Lack of Transparency

While there are countless data gaps and inaccuracies in Northern Pulp's Environmental Assessment related to potential harmful environmental effects of the Project, I would like to focus on one concern with respect to public consultation, specifically Northern Pulp's Community Liaison Committee.

Northern Pulp provides the following description of their Community Liaison Committee (CLC) in their EA.

"NPNS has an existing Community Liaison Committee (CLC). The CLC serves as a formal consultation process with certain local stakeholders in compliance with NPNS' Industrial Approval to operate. The CLC serves a very important role in providing advice and facilitating two-way communication. The CLC members represent themselves as members of their community and provide their own personal perspective to the committee. They also provide constructive input on how the company may better address and respond to the community needs and concerns. The CLC meets at a minimum twice annually, in Spring and Fall, as well as convening on an as-needed basis. The CLC includes representatives from Pictou Landing First Nation, the communities of Abercrombie, Pictou Landing Moodie Cove and Pictou, NPNS staff, and NPNS executives."

In the Socio-Economic Impact section of the NPEA, under 8.14.6 *Follow-up and Monitoring [operation and maintenance phase]*, Northern Pulp states: *The existing Community Liaison Committee will continue to serve the very important role in providing advice and facilitating two-way communication between the local*

community and NPNS.

And also under the Socio-Economic section, under 8.15.3.3 Characterization of Residual Environmental Effects, the NPEA states: *The existing CLC will continue to provide two-way communication between NPNS and the surrounding communities.*

Northern Pulp’s CLC meeting minutes (sample: <http://northernpulp.ca/assets/Uploads/NPNS-CLC-June-2018-summary-notes-FW.pdf>) indicate there is a representative from Moodie Cove on the CLC, however no name is provided for that committee member nor any of the other committee members.

As mentioned above, our cottage is on Moodie Cove, along with 20 other cottages that are accessed by three private roads. There are no permanent residents on Moodie Cove.

I contacted an executive member of the association for our road, , to ask if he knew who the representative was for Moodie Cove on Northern Pulp’s CLC.

was unaware there was a representative and called Northern Pulp on behalf of our association to find an answer.

received a call back from Northern Pulp’s Technical Manager. indicated that the CLC members are anonymous and that if we wanted to present any of our views or questions to the committee, it would have to be through her.

In Nova Scotia Environment’s *Guide for the Formation and Operation of a Community Liaison Committee* (https://novascotia.ca/nse/issues/docs/Community_Liaison_Committee_Guideline.pdf), it states the purpose of a CLC is: *To represent community interest by providing an avenue for the mutual exchange of information between the proponent and the community with respect to any existing or potential environmental effects of the project plan and activities.*

The Guide also details the following mandate and responsibilities by the proponent and CLC members:

Section	Description	Issue/Concern
The mandate	<i>A forum whereby the residents can bring any issues of public</i>	The only residents who can bring their issues forward, are the ones sitting on the CLC, therefore Northern Pulp’s CLC fails to represent the concerns of their communities.

	<i>concern related to proponent's activities to the attention of the facility operators.</i>	
Proponents Responsibility	<i><u>Notice of the CLC formation and members must be made known to the residents of the affected area by the proponent.</u></i>	Northern Pulp's members have remained confidential making it impossible for residents to bring their concerns forward to the CLC.
Proponents Responsibility	<i>The proponent should ensure that the views of the CLC are made available to the public in an appropriate manner.</i>	Minutes from CLC meetings made available to the public are vague and provide no detail on input from CLC members (sample: http://northernpulp.ca/assets/Uploads/NPNS-CLC-June-2018-summary-notes-FW.pdf)
CLC Members' Responsibility	<i>Discussing community views, issues and concerns with respect to the project plan and activities.</i>	It is impossible for CLC members to adequately express the views of the community when the community is unaware of who to express their views to (CLC members).

In summary, Northern Pulp's Community Liaison Committee fails to facilitate any genuine or meaningful two-way communication between the local community and Northern Pulp. The CLC also fails to effectively represent the concerns and opinions of the surrounding community. It is my understanding that Northern Pulp's CLC structure has been brought to the attention of Nova Scotia Environment in the past,

and that NSE has accepted this poor level of functioning.

Not only did Northern Pulp fail to hold a second set of public consultation sessions to inform the community on changes to their proposed ETF and the new Caribou outfall location, but they are now suggesting their CLC committee will be a primary tool in mitigating environmental effects from the construction and operation of this new facility to the socio-economic environment. (section 8.14 - Socio-economics Environment, 8.14.4.2 - Mitigation).

As the Minister of Environment, you are obligated to *'consider steps taken by the proponent to address environmental concerns expressed by the public'* when making your decision. Northern Pulp has not done an adequate job informing the public and collecting concerns, and therefore cannot properly address them. As well, Northern Pulp does not have the proper infrastructure in place to address any public concerns during the construction and operation phases of the project.

Based on the above outlined concerns, combined with the extensive data gaps in the NPEA, I am requesting that you reject Northern Pulp's proposal. Northern Pulp has failed to demonstrate that their project will not cause adverse effects to the environment that can be mitigated.

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: Comment on Northern Pulp pipeline plan
Date: March 9, 2019 1:19:01 PM

Hi folks,

My name is _____ and I work at the Ecology Action Centre _____ I grew up in Pictou County, and know the waterways of the Northumberland Strait, in particular Merigomish Harbour, very well.

Thanks for the opportunity to provide feedback on the Northern Pulp effluent treatment plant and pipeline proposal.

As a kid, I remember walking across the Pictou causeway with my parents, holding a sign protesting the use of Boat Harbour as an effluent dumping ground. My father, _____, was _____ Citizens Against Pollution, a community group formed to raise awareness of the negative health effects of the pulp mill on the residents of Pictou County.

This effluent treatment plan is a bad idea. A pipeline into the Northumberland Strait will negatively affect the livelihoods of fisherfolk and Indigenous communities moreso than any other group of people, and for that reason alone it should be abandoned.

However, there are many other reasons the pipeline plan should be aborted, including:

- The plan will increase the scale of the environmental damage from one county in Nova Scotia to to the waterways of all three Maritime provinces.
- The track record of Northern Pulp shows that a leak or some failure of the effluent treatment infrastructure is more than likely, and that such a failure could go unnoticed for too long.
- The legacy of disrespect and abuse of the Pictou Landing First Nation will be continued if this pipeline is installed.
- That the government of Nova Scotia acts as both the regulator and the funder of the treatment facility shows that they are not in a position to make clear-headed decisions about it. A federal Environmental Assessment is entirely appropriate here.

The pulp mill in Abercrombie is old and out of date, and it will eventually close. As the government of Nova Scotia, you have the opportunity to prepare for that inevitability by retraining workers and increasing environmental standards so that the forestry and the fishing industries can cooperate.

Or, you can continue to throw good money after bad, shifting the burden of cleaning up the Northumberland Strait, rebuilding the economy of the Town of Pictou, and repairing the relationship with the Pictou Landing First Nation onto the next generation, all while degrading a special part of the world in the process.

30 years from now, will my children still be speaking truth to power on this issue?

Please choose wisely.

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: Replacement Effluent Treatment Facility Project comments
Date: March 9, 2019 1:29:16 PM
Attachments: [Northern Pulp Environmental Assessment Comments.pdf](#)

Good afternoon,

Please find attached my comments on the proposed Replacement Effluent Treatment Facility Project submitted by Northern Pulp.

If you have any questions or comments for me, please do not hesitate to get in touch by email at [@unb.ca](#), or by phone

Sincerely,

March 7, 2019

To whom it may concern at the Environmental Assessment Branch of Nova Scotia Environment,

I write you today to voice my concerns over the replacement effluent treatment plan proposed by Northern Pulp. While I moved to New Brunswick last summer, I was born and raised in Nova Scotia, and have been an active member of the angling community along the rivers and saltwater that flow from the Northumberland Strait . I have also been a member of the Atlantic Salmon Federation . For the danger posed to Atlantic salmon and other vulnerable species, I ask you to delay any decision about this proposal until there has been adequate time for risk assessment and public consultation.

As I am sure you are aware, Atlantic salmon are listed as a species at risk by COSEWIC. The population of Atlantic salmon in North America has been in steady decline for decades. Since 1995, the population of one sea-winter (1SW) salmon has fallen by about 56% as compared to the population measured between 1971 and 1985¹. As is referenced by Northern Pulp on p.379 of their proposal, two of the most critical influences in the decline of Atlantic salmon are climate change, and changes to ecosystems and habitat. Atlantic salmon are very sensitive to changes in temperature² and water quality. The proposal lists potential operational effects on marine fish species on p.385. The list includes the change in temperature as a result of effluent discharge, but does not elaborate on the extent of the effects this could have on Atlantic salmon or any other species for that matter. Furthermore, there are no mitigation measures listed for this temperature increase. On p.389, they say that the temperature of the water will be within 0.1 degree Celsius of the background temperature at the end of the 100m mixing zone. I find it challenging to believe that a continuous discharge of 62 to 90 million litres of effluent daily would not have a more profound effect on the temperature of a much larger area in the Northumberland Strait over the the course of several decades (Northern Pulp has been vague about the potential lifespan of this project once complete in their Project Schedule on p.81). Organizations like the Margaree Salmon Association, the Atlantic Salmon Federation, and the Miramichi Salmon Association have invested a substantial amount of time and money into conservation efforts for the shared goal of protecting this vulnerable species. Additionally, the angling industry for Atlantic salmon in Atlantic Canada is a driver of local economies and tourism dollars, with \$166 million in spending on the industry in 2010³. Based on the changes to the habitat and water quality for Atlantic Salmon that would result from the proposed project, I think it is inevitable that the species would suffer. To damage this resource is conservationally

and financially counterintuitive. Due to this potential for harm, I ask that you delay your decision on the matter until a complete risk assessment to the species can be completed.

While the issue of conservation of Atlantic salmon is one that is very important to myself and several others personally, my points above only address the potential concerns for this one species. There are countless other species that will certainly be impacted should this project be allowed to proceed. The health of many of these other species is depended on by local commercial fishermen for their livelihoods. I urge you to consider the magnitude of the impact on fish habitat and health before allowing this project to continue.

Sincerely,

References

- 1 Fisheries and Oceans Canada, 2018
<http://www.dfo-mpo.gc.ca/reports-rapports/regs/wildsalmon-atl-saumonsauvage-eng.htm>
- 2 Fisheries and Oceans Canada, Temperature threshold to define management strategies for Atlantic salmon (*salmo salar*) fisheries under environmentally stressful conditions, 2012, p. 4, <http://www.dfo-mpo.gc.ca/Library/346488.pdf>
- 3 Gardner Pinfold, Economic Value of Wild Atlantic Salmon, prepared for the Atlantic Salmon Federation, September 2011, p. V

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp proposal
Date: March 9, 2019 1:47:43 PM
Attachments: [Response to NP EA -](#) [001.pdf](#)

I attach my written comments (4 pages) to Northern Pulp's proposal to pipe effluent into the Northumberland Strait.

March 9, 2019

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, Nova Scotia B3J 2P8
Fax: (902) 424-6925

Via e-mail at ea@novascotia.ca
and fax 1-902-424-6925

Dear Sir or Madam:

RE: Northern Pulp's Replacement Effluent Treatment Facility Project

I am a commercial fisher and a resident of Pictou County. I grew up in Caribou very near the Caribou ferry terminal. My father and many other family members were commercial fishers in Caribou. I fished in the industry since the 1970's, starting when . Following attendance at university, I was drawn back home by the Northumberland Strait. I have owned my own fishing enterprise I fish rock crab, herring and scallops out of Caribou. I fish lobster in another area. I have a large financial investment in the fishing industry. The health of the Northumberland Strait is vital to my retirement and my future. My son has recently started fishing with me and a clean and sustainable Northumberland Strait is essential for him to have a future in the fishing industry.

As fishers, we invest a lot of time, energy and money to maintain the sustainability of the fishing industry. We regulate ourselves by proposing and agreeing to such things as catch limits, buffer zones, reduced efforts, and modified nets and traps. The EA proposal will harm the Northumberland Strait, our fishery, and our future.

There are many errors and missing information in the proposal, as follows:

1. The proposal did not consider the behaviour of herring. Herring gather in the deep waters of the ferry channel and other deep water areas to get away from predators. They come out of the deep waters at night to spawn on the shallow banks in the adjacent areas. If fresh, hot water containing who knows what is pumped into their deep water hiding zone, the herring will not go there and will have no where to hide. I believe this will have irreversible effects on the herring species in the area, and their spawn.
2. Tuna are in the area of the outfall. While fishing herring last year, I saw approximately 6 tuna charter vessels at one time in the area outside Caribou Harbour. Last year, tuna washed ashore in

Caribou Island and Simpsons Beach (part of Caribou - Munros Island provincial park).

3. Contrary to what is showing in Figure 8.12-3 of the proposal, rock crab is fished all over the proposed effected area. The rock crab fishing area we call “Africa” because of its shape, runs from Caribou Island, Pictou Island to about Arisaig. The footprint of the pipe runs through a vital rock crab nursery where juvenile crab are spawned and grow to maturity.

4. As fishers, we are required to maintain a log book while fishing rock crab, herring, scallops and lobster. Although we fish these species in a very large area throughout a day of fishing, we are required to record our fishing location just once per day. As such, our logs do not accurately reflect the expansive areas where we fish. For example, in one day, a fisher may leave Caribou Harbour and travel to Charlottetown Harbour and fish everywhere in between. In the fishery log, if a fisher records fishing in Charlottetown Harbour, the fishing effort in all other areas is not reflected.

5. Fishing of some sort is conducted everywhere in the Northumberland Strait. It is fair to say there is no area of the strait that is not fished. Fishing areas for a certain species may vary from year to year. Therefore, using data of fishing areas from 2001, for example, as was used in the proposal, may not accurately reflect the fishing area in 2018 for that same species. Fish move and follow food sources. Piping of effluent will be detrimental to phytoplankton and zooplankton which are the food source for fish and mammals and are building blocks for all ocean creatures.

6. Some fishing bottoms also may change over time, or from year to year, due to storms or man made causes. I have fished lobster in Wallace since 1993. The construction of the fixed link between New Brunswick and Prince Edward Island took place between 1993 and 1997. The building of the fixed link brought great changes to the lobster fishery in my area - huge decline in lobster catches and changes to the sea floor. I witnessed a change in the water which went from clear to very muddy everyday. I lost a large area of my fishing bottom due to sedimentation. What was once a rocky floor was covered by mud or silt. When I pulled my lobster traps, they were covered with a fine muddy film. The film also covered the bait on my traps which hindered their ability to attract lobster, caused the bait to rot, and attracted sand fleas which ate the bait. I suspect that the silt interfered with the lobster’s respiratory and other functions as they were covered with the muddy film as well.

The lobster fishery in that area is only very recently starting to recover. I notice less silt in my traps and the water is becoming clearer. Things are going back to where they were when I first bought my lobster licence in 1993 before the start of the fixed link construction. My catches are finally returning to what they were before the construction. The value of fishing enterprises was greatly reduced in this area for the last 20 years or so, and they are now just recovering to be on par with fishing areas not effected by the fixed link. I did not receive any compensation for my economic loss or the damage to the environment. I don’t want that to happen again.

7. The scallop information in Figure 8.12-5 is not accurate. In the scallop logs fishers must complete, there is no place to enter fishing location for every area where scallops are fished.

There is no way to determine where scallops are caught in the strait. This figure also shows

scallop catches in areas where there is a buffer zone and therefore no scallop fishing in that area. This proves that the figure is not accurate and should not be relied on. It should also be noted that recreational scallop divers dive for scallops in the area behind Munros Island, and in the area around the outfall location. They are permitted to dive for scallops within the 1 mile buffer zone, but they don't keep logs or report where they have fished.

8. Figure 8.12-6 is also not accurate. The map does not show the herring nursery which is in the area of the outfall. Also, there is herring fishing all around Pictou Island and not just as indicated. We also fish for herring in the area of the proposed outfall location. Herring is a fixed gear fishery. We use anchors on each end of our herring nets. The pipe and proposed no anchor zone will significantly interfere with our herring fishery. It is not possible for us to simply go somewhere else to fish if the fish are located in the area of the outfall or the no anchor zone and not anywhere else. The herring pack consists of a large group of boats all fishing for herring at once - possibly 200 boats in the same close area at one time. The pack is so large that sometimes the PEI ferry steers out of its normal route to avoid us.

9. Figure 8.12-8 is also not accurate. There are mackerel around Pictou Island and Caribou Island and in area of the outfall. There is mackerel in Caribou channel and Pictou channel, and around every wharf. There are many people who fish mackerel from all the wharves in the area, including Caribou. They also fish for bass, smelts, capelin and other fish from the wharves. This is an important healthy food source for many people in our area and part of our tradition and culture and must be protected.

Mackerel like going along the edge of the channel because it is deep, and they are hunting the bait fish which is also in the channel. They tend to swim back and forth from deep to shallow water.

10. The scallop buffer zone is not accurately depicted in Figure 8.12-10. The scallop buffer zone extends all around Munros Island and Caribou Island. The buffer zone is 1 mile from any point of land, which includes all islands.

11. It is not appropriate or accurate to use the characteristics of Pictou Harbour as a proxy for those of Caribou Harbour. Caribou Harbour is closed except for a narrow opening. It does not flush well. There is more flushing in Pictou Harbour and 3 large rivers flow into it. My father, who grew up in the area, used to tell stories of his grandparents walking cattle from Caribou Island to Munros Island (which in the past, was also known as Doctor's Island) at low tide. This shows how narrow and shallow that area is. The ferry channel is artificial and was created when the ferry services started, and is maintained only through periodic dredging.

12. The wharves at Caribou Harbour are used for more than tying up vessels. We sell our catches to the public and commercial buyers at the wharf. During herring season, for example, fish buyers set up buying stations where we off load our catches. Buyers who use the vacuum system to remove herring from the boats, pump water from the harbour onto the vessel in order to suck up the herring. It is like a wet vac.

During lobster season, the buyers tie large numbers of lobster in floats in Caribou Harbour until they are transported for processing. Floats are large containers which allow for water to flow in and out to keep the lobster alive. Will this water be contaminated by effluent thus making the fish toxic?

We use water from the strait to keep our catch alive during the day. I am concerned that I will inadvertently use effluent water on my fish which could cause contamination. How will I know the difference between water that contains toxic effluent and water that does not? I also use that water to wash my fishing boat and gear as I enter the channel at the end of my day. I don't want to use effluent to clean my boat and gear. What effect will this have on my health and my equipment?

There is a lack of information provided in this proposal and large gaps in terms of the effect on the environment and ecosystem of the Northumberland Strait. Much of the information that is provided is not accurate and there are a lot of discrepancies. This makes me question the credibility of the entire proposal. The proposal must be rejected. Nova Scotia is supposed to be Canada's ocean playground. We don't want it to become Canada's ocean dump. Northern Pulp should give in, give up and get out.

Concerned fisher,

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Effluent Pipe
Date: March 9, 2019 1:58:59 PM

Dear Environment Minister Margaret Miller,

I am writing to you about my concern with Northern Pulp's plans for an effluent discharge pipe in the Northumberland Strait. I am a resident of Pictou County, I have grown up walking the beaches, swimming in the waters and fishing in the waters of the Northumberland Strait. The idea that Northern Pulp wants to use, what I think of as my backyard, as a dumping ground for their waste is unfathomable.

We are living in a time where every action on the environment has dire consequences. The ramifications of those consequences will be felt for generations to come. One example that is ailing the Earth's ocean's right now is hypoxia zones. Hypoxia zones are areas in the ocean that do not have enough oxygen in them to support aquatic life. Sea animals that are able, avoid these areas, those that cannot may suffocate and die. That is why these areas are also known as dead zones. If Northern Pulp is allowed to put their pipe in the Northumberland Strait it will create a dead zone.

I was able to attend the open house presentation hosted by Northern Pulp back in December of 2017. an engineer and the principal consultant for process and environment with KSH Solutions was also in attendance. He was fielding many questions from the concerned populace. One of the questions I happened to ask was, will the effluent cause a dead zone? His answer was Yes. My next question was how big would this dead zone be? His answer was that they did not know. This area that people recreationally fish, boat, swim and commercially fish in would be dead, how far reaching that could be is unknown. That is a frightful thought.

Table E.1.1-1 (Summary of Project Related Residual Environmental Effects) in Northern Pulp's EA shows that there is no significant residual environmental effect on harbour water quality, marine fish or marine fish habitat. I disagree with their findings as I would define a dead zone as a seriously significant environmental effect. This is an issue that is not covered well in Northern Pulp's EA and requires more thorough investigation. I believe as Environment minister you need to request an Environmental Assessment Report.

On Nov 7, 2016 the Federal Government launched the Oceans Protection Plan. It notes that Canada has the world's longest coastline and the Ocean is one of our most important resources. Should we not follow along with that mantra and do our part to protect our oceans, our resources. Planet Earth is a place of finite resources and capabilities to rehabilitate itself. Please do the right thing as environment minister and protect the environment.

Sincerely,

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 1:59:12 PM

Project: replacement_effluent_treatment_facility_project Comments: I am absolutely appalled that the Nova Scotia government is even considering Northern Pulps proposal to pipe its toxic effluent. Is 50 years of evidence not sufficient for any one with half a brain to understand that we are poisoning ourselves, our fisheries, and our forests for this irresponsible and criminal corporation? Are politicians too ignorant, corrupt, or indifferent to do the right thing? Name:
Email: @gmail.com Address:

Privacy-Statement: agree x: 44 y: 17

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 2:11:30 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:
 @ns.sympatico.ca)

From:
To: [Environment Assessment Web Account; Minister, Env](#)
Subject: Fwd: Northern Pulp Effluent Treatment Facility Replacement Provincial EA, Dispute !
Date: March 9, 2019 2:19:11 PM

----- Forwarded message -----

From: [@lobsterpei.ca](#)>
Date: Sat, Mar 9, 2019, 12:17 AM
Subject: Northern Pulp Effluent Treatment Facility Replacement Provincial EA, Dispute !
To: [@gmail.com](#)>

Dear Minister Margaret Miller,

My name is _____ from Belfast PEI.

I am writing today with extreme concern over the proposed application for Northern Pulp to pump 70 - 90 000 000 liters of effluent a day into the Northumberland Strait.

There are so many aspects to this file that it could take days to explain but to put it short, Northern Pulp wants the fishing industry in NS, PEI and NB to take 100% of the risk on whether this effluent will affect lobster, lobster larvae, Herring, mackerel, rock crab and tuna stocks.

We know that the government of the day in the mid 60s along with Scott Paper told Pictou Landing First Nations that the water /effluent going into Boat Harbour would be clean and that it would not affect fish or habitat in that estuary. Within a week, all fish were floating on the surface dead, and now 52 years later Boat Harbour is a toxic waste dump that looks like something from a science fiction movie. It is disgraceful and the PLFN and the residents of Pictou have lived with this far too long. I applaud your govt for sticking to the 2020 deadline to shut Boat Harbour down.

Boat Harbour has been catching the dioxins, furons, chloride, Chlorine Dioxide, mercury and other toxic metals for 52 years. It gives the effluent 30 days to cool while the toxic chemicals settle out. The new proposed process would see the effluent treated for hours, then solids ,chemicals ,toxins, and all be pumped directly onto Prime lobster, crab, Herring, mackeral and tuna habitat and fishing grounds.

Northern Pulp does NOT know the make up of the chemicals that will be in the effluent, they told us that. I asked in a meeting in New Glasgow, the fall of 2017 with Northern Pulp and 350 fishers, where the studies are that prove that this new proposed effluent will not harm lobster larvae ?? All their high priced lawyers and consultants at the meeting just looked at each other then admitted publicly that they did not study that at all,,, "but don't worry, it will be fine". Can you imagine? The whole basis of our industry is larvae and they didn't even test it !!!!!

The water proposed to be dumped is fresh water and is significantly hotter than the receiving water, and we know scientifically that warm fresh water itself will kill lobster larvae, let alone the toxic soup and solids that will be pumped out with it. Salinity and temperature affect lobsters a lot. Ask SW Nova lobster buyers that hold lobsters in out door pounds what happens to lobsters if it rains hard. Also, we keep thermometers in our Lobster traps in 4 or 5 different locations throughout the season, if the temperature changes more than 2 degrees up or down it affects how they trap. I have seen them hide for days till the temperature stabilizes. The proposed effluent is over 20 degrees hotter than the receiving water. They will not stay in the area. That doesn't even factor in the chemicals and solids. The solids will be laced with chemical, fish are curious, anything with a different smell or taste they assume is food. Little would they know they would be poisoning themselves.

Then we asked Northern Pulp about ice cover and how it affects dilution and mixing ?? Again, they didn't know and did not think about that.... Or test it .

We told them at the same meeting that there was not enough water depth in Pictou Harbour to run the pipe, because the ice would crush it. They said no it will be fine. Well after 3 different survey crews at work in 2018 they all concluded that Pictou Harbour is too shallow, the pipe would get crushed by ice.

This company Paper Excellence Has 5 other pulp mills in Canada, 2 of them, Meadow Lake Saskatchewan and Chetwin BC have closed looped effluent treatment facilities that recycle their effluent. I proposed this technology as a solution for the Pictou Mill but Northern Pulp did not want to talk about it, " cost being the factor" Our environment is just as important as Western Canada's environment is !!!!!

They said, that during the Kraft process using Chlorine dioxide for bleaching (like at the Pictou Mill now) if used in a closed loop, it will destroy (eat through) the piping system. So I said let me get this straight, your effluent will eat through metal pipes, but NOT hurt baby lobsters suspended in it ??? Nothing but silence.....

They would need to change the process to peroxide bleaching for a closed looped system so that the pipes would not be ruined. But Northern Pulp is not interested investing the required dollars to change the plant.

The NS Government finds themselves in a spider Web of conflicts of interest on this file that the public are just finding out about now.

Some of he glaring ones are, because of the 1995 endemnity agreement, the province of NS have to pay for the future cleanup of Boat Harbour, the construction of the New Treatment Facility and outfall, they are paying for the environmental report of the new treatment facility for Northern Pulp, they have to pay for any shut down time for the mill if closed before 2030 and they want to consider a class one in house provincial environmental assessment, that can be signed off by themselves.....

The Premier of NS of the day mid 1990s is now the Chair of the Board for Northern Pulp,

and the lawyer that wrote the indemnity agreement in 1995 is a deputy Minister under Premier MacNeil now.

So how can we POSSIBLY get a fair, transparent, detailed environmental assessment from a fast tracked provincial class 1 ?? This project affects 3 provinces and the proposed site is in Federal jurisdiction waters. DFO, Transport Canada, and Environment Canada need to be involved to protect our Industry. The Federal Government is changing the Oceans Act and the Canada's Ocean Protection Plan, and they like to wave the environmental flag around the world. Marine Protected Areas are a big topic right now across Canada. This very location that Northern Pulp has picked for the outfall pipe, is a "Marine Refuge" officially designated by DFO, Meaning it is Prime fishing grounds and is protected, it is part of the MPA process. How could it be used as an Industrial toxic dump zone ?? Seriously?? 90 000 000 liters a day of unknown effluent with 4 tonnes of solids mixed in ??? Dumped on a Marine Refuge. !!!!

Let's talk about what we know for a fact, Stantec has been involved for years with Northern Pulp and have done air quality reports and most recently completed a 129 page receiving water study.

This report does not say what is in the effluent under the new proposed treatment facility outfall, heavy metals, solids, chemicals etc , or like I mentioned earlier, how it would affect lobster larvae, adult lobster, Herring spawn, mackerel spawn, crab larvae, or their habitat..... Or how ice cover like we have "right now" would affect mixing and dilution. There are NO reassurances and fewer guarantees.

The reason I raise this point is because Stantec was heavily involved in the environmental impact report and engineering of the Confederation Bridge. They gave it the All Clear, despite a team of scientists including David Suzuki that said there were 1200 possible environmental affects. David Suzuki said to build the bridge in the Northumberland Strait would be "monumental stupidity". And it is built directly on the biggest earth quake fault in the Northumberland Strait....

Well hind site is 20/20 and we know now who was right.

I was fishing with my father at the time, and prior to the bridge ,catches off of Point Prim 45kms east of the Bridge were 20 -30 000lbs per spring season. As soon as construction started in Oct 1993, the following spring there was a major decrease in catch, and by 1997 when the bridge was finished catches had dropped to 5000lbs of lobster for an entire season. After 4 years catches came up to 10 000 lbs, then slowly rebounded to 15000lbs but it took 18 years to get over 18000lbs and now 22 years later the catches finally came back to previous levels.

However, over 40 % of the Lobster Fishers on PEI from Wood Islands to Victoria in the spring were forced out of business due to catches being so low for so long. Also the fall season from Victoria to Egmont Bay saw similar results. NB and NS coasts 60kms on either side of the Bridge faced the same fate.

Fishers had to sell their licenses to Fishers in Beach Point east, and to West Point west, to get far enough away from the Bridge where the affects were not as drastic. The Federal govt came up with a buy back program 7 years ago as well to buy back some of the older fishers, once it realized the extent of the damage that was done. But the money paid for the few licenses that they bought was a fraction of the value of a license today.

The Biggest noticeable change was the silt in water column, we used to be able to see the ocean floor in 20' of water. From 1994 - 2006 we could not see 3' into the water due to silt. This affected the lobster, Herring, mackerel, tuna and scallops as well. After 2006 it slowly started to clear again and now it is like before. However, we hardly would see barnacles on buoys and never on traps. Now the buoys are covered a half inch thick with them and the traps as well. We have to use paint scrapers to get them off.

Another change was the increase in tidal currents. They built the bridge directly on the

narrowest part of the Strait, 44 piers, which created a venturée affect increasing the tide by 30%. Before the bridge our buoys would sit on top of the water and never pull below the surface. From 1996 on, since the Piers were placed, the currents now pull the buoys completely under water out of site. We had to add 4 fathoms of extra buoy line to our Lobster and crab gear in order to retrieve it.

The increased silt drove lobsters to the North side of PEI, we know this because the same amount that the catches in LFA 25 and LFA 26A were down, LFA 24 increased the same amount.

Another affect was the introduction of foreign invasive species like tunicates (5 different types) and green crabs. All 6 of these species were never here before and are not native to the Gulf of Saint Lawrence. We found out they arrived attached to the hull and in the bilge water of the HLV Svanen, the Dutch built, world's largest ocean Crane brought here to place the bridge sections.

The tunicates devastated the mussel industry on PEI, (Canada's largest mussel source) and drastically affected the oyster industry. Green crabs also targeted oysters and both them and tunicates are still a huge problem today costing these industries tens of millions of dollars to combat them every year.

All of these things actually happened in real time, despite "Stantec" and others stating that the fishery would not be affected and not to worry.....

The PEI government since 1996 have had a lobster index program and a Sea Sampling data base. Every year, spring and fall, provincial government Biologist come out onboard 5 times throughout the season in 60 harbours around PEI to measure every lobster that comes aboard, undersize, berried females, window females, legals etc etc. The boats involved in the program, which I am one, record their catches and window females every day in a logbook. Now we have 23 years of lobster science on PEI, DFO () admits that PEI has the best, most accurate lobster science in the world. If you have any questions on the data or the program, call PEI Lobster Biologist Robert MacMillan or at RJMACMILLAN@gov.pe.ca

We are Very Very concerned about the unknowns on this proposed new treatment facility/effluent for Northern Pulp. Their track record in Pictou and around the world with their parent company Paper Excellence has a dismal reputation. It seems they will do near anything for profit. Our industry is too valuable, and you as a Minister have an obligation to make sure that things are done right. The work is not done,,,,,and the 1700 page proposal does not answer the real questions that our industry needs answered.

Northern Pulp knew 4 years ago that the deadline was 2020. "They" decided to do nothing for 3 years, now they are pressuring you to make a rushed last minute decision.

The 1200 environmental affects of the Bridge were "risk managed" and or "mitigated" away. Some fishers in Borden PEI and Murray's Corner NB got a one time compensation check of \$10 000. Meanwhile they were forced out of business, and the fishers from Egmont Bay, Summerside, Nine Mile Creek, Point Prim, Pinette and Wood Islands got nothing.

The compensation package was a complete disgrace. But one thing it did do was taught us a valuable lesson that will never happen again.

If Northern Pulp and the NS Govt are so confident in the information they have now, then it won't be a problem to have a 10 billion dollar compensation plan insurance policy in place.

Like I said before, 100% of the risk is on us right now, and that is NOT an option.

The more transparent and thorough way to handle this would be for you as Minister to reject this current proposal ,and to call for a full indepth , Federal Environmental Assessment with CEAA. This will serve to protect your office and Ministry as well from 100% of the Liability if things go wrong. Noone wants their legacy to be a devastated natural resource.

In December 2017, Environment Canada officially listed "Kraft Pulp Mill Effluent" as a

"Toxic Substance".....

The lobster Industry in the Maritimes was worth 2.4 Billion dollars in 2018, and has been over 2 Billion a year for many years. A big portion of this Industry Is in the Northumberland Strait. We know from Giro studies that the water in the Pictou Area " Giros" (stays in the area) for 5-6 weeks and up to 12 weeks in certain conditions. Lobster larvae float in the top 3' of the water column for 6-8 weeks every summer. This concentration of toxic effluent and it's affects have not been factored in.

The Marketing of " Canadian" Lobster as a whole could also be affected. Remember the "one" Mad Cow from Alberta, how it devastated the Beef Industry across Canada for a decade. The full costs are still not known today but it's in the 10s of Billions. It's only the last few years that that Industry has recovered.

Only court orders have forced this company and previous owners of the Mill to pay fines for repeated effluent spills, contamination and repeated air stack test failures.

We Need your help Minister Miller ! Please reject this current Northern Pulp treatment facility /effluent discharge proposal and call for a Full, detailed, transparent and thorough Federal Environmental Assessment through CEAA, so that all of the required data can be found and tests completed.

I thank you for your time, and consideration.

Yours Truly

From:
To: [Environment Assessment Web Account](#)
Subject: Pulp Mill Concerns
Date: March 9, 2019 2:20:07 PM

Dear Environmental Minister Miller

I am writing to express my concerns about Northern Pulp's plans and I implore you to reject their proposal, or at the very least, order an environmental assessment report. The decision of whether or not the mill's continued operation will have adverse effects to human health and cause unmitigated environmental damage is a no brainer. If you look at the fact that the mill's presence is proven to cause cancer in the inhabitants of the area, it seems that it is quite clear that the continued operation will no doubt have adverse effects to human health. This quote from the Halifax examiner says it all really: "Dalhousie University researcher [redacted] has come forward to defend her 2017 ambient air quality study about cancer-causing air emissions detected near the Northern Pulp mill after finding that her study was "misrepresented" in the mill's recently registered Environmental Assessment [EA] for its proposed effluent treatment facility." Whether or not the law recognizes a person's right to a clean and safe environment, logic and compassion for other humans should tell us that people should not have to live with a corporation moving in next door and harming their health. It is also ridiculous to think that merely closing boat harbour is in any way ending the environmental racism that is the mill. The fact that one of their most valuable resources was allowed to be destroyed by Northern Pulp is criminal, and if you are trying to do right by them, obviously you cannot allow the culprit to continue to poison their air!

They are dumping their effluent straight into the ocean. Why must we say more? This is supposed to be Canada's ocean playground for god sake. When you have local fishermen who are telling you that this is a terrible idea, that should be taken seriously. These people work every day out on the strait, and they are the industry that defines Nova Scotia. They don't sell Nova Scotian craft paper at the airport do they?

Sincerely yours,

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 2:38:08 PM

Project: replacement_effluent_treatment_facility_project Comments: The Honorable Margaret Miller Environmental Assessment Branch Nova Scotia Environment P.O. Box 442 Halifax, NS, B3J 2P8 Dear Minister Margaret Miller, The purpose of this correspondence is to ensure that the "Replacement Effluent Treatment Facility ETF Project" submitted by Northern Pulp Nova Scotia Corporation NPNS, is subject to a full panel Federal Environmental Assessment EA. I am writing you this letter today as a Nova Scotia Taxpayer, a proud and long-time resident of Pictou County, a First-Generation Fisherman and a soon-to-be father. The feeling of making your living on the water, watching the sun rise and set each day, working hard in hopes of being rewarded so that you can support your growing family there is no better feeling. As a Fisherman of Lobster Fishing Area 26A LFA 26A, the proposed effluent discharge pipe will dump millions of litres of effluent, every 24 hours, within the grounds upon which I fish. This effluent will also carry approximately 945 kg of solids into the Northumberland Strait each day that were not previously reaching the strait. This not only puts my livelihood at risk, but also hundreds of others who rely on the catches in LFA 26A. According to Northern Pulp, the probability of this treated effluent negatively impacting the fishery is highly unlikely. Based on similar promises made to the first nations and the environmental disaster that became Boat Harbour, it is my belief that Northern Pulp cannot be trusted. Allowing a pipe to pump millions of litres of effluent directly into the strait without confidently knowing the environmental impacts, tourism fishing industry impacts - should NOT be a risk this government is willing to take. worked their entire careers at the mill " they both died of cancer.

. While I am not solely blaming this on the mill, studies have shown that Pictou County has the highest rates of cancer incidence in Nova Scotia. These same studies discuss the pollutants entering the air, from the mill, as being the likely cause. Not only is Northern Pulp a risk to the marine environment, but also to the health of the thousands of residents of Pictou County. In light of the fact that their practices have been questionable for 60 years, they should be subjected to the highest level of federal environmental assessment. It is my belief that it is your mandate to protect the environment from unreasonable human activity, and to protect humans from unacceptable environmental risk. With that in mind, I am asking you to please ensure that Northern Pulp's "Replacement Effluent Treatment Facility ETF Project" is subject to a full Federal Environmental review. Thank you. Name: Email: @gmail.com

: Privacy-Statement: agree x: 55 y: 23

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 3:25:59 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@unifor.org)

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 3:35:29 PM

Project: replacement_effluent_treatment_facility_project Comments: Allow northern pulp to build the new facility and continue running to keep people working Name:
Email: @hotmail.com Address:

Privacy-

Statement: agree x: 56 y: 17

From:
To: [Environment Assessment Web Account](#)
Subject: Public Comment - NPNS Waste Treatment Plan
Date: March 9, 2019 3:39:17 PM

March 8, 2019

Nova Scotia Environment
Environmental Assessment Branch
P.O. Box 442
Halifax, NS
B3J 2P8

Re: Replacement Effluent Treatment Facility (ETF) Project for Northern Pulp

I am a resident of the Town of Pictou who is very concerned about Northern Pulp's Environmental Assessment (EA) application. After reviewing the company's application documentation, I remain wholeheartedly opposed to the proposal because i) many aspects of the proposal are inconsistent with the principles of sustainable development that are supposed to be protected with the *Environment Act*, ii) the information provided in the documentation is misleading, and iii) there is a lack of trust that, if approved, Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations. Each of these points will be addressed separately below.

i) The proposal is inconsistent with the principles of sustainable development protected by the *Environment Act*.

The proposal is inconsistent with the principles of sustainable development that are supposed to be protected with the *Environment Act*. In particular, the absence of critical information in the application documentation suggests that the precautionary principle identified in Nova Scotia Environment's Guide to the Environment Act (<https://www.novascotia.ca/nse/ea/docs/EAActGuide.pdf>) ought to outweigh any other consideration. According to the precautionary principle, an activity whose effects are disputed or unknown should be avoided, and therefore, the proposal ought to be rejected because:

- The final characteristics of the effluent are admittedly **unknown** by Northern Pulp and will remain **uncertain** until the new treatment system is up and running as indicated in Section 9.0 Human Health Evaluation, page 502, "there is presently uncertainty regarding the likely chemical composition and characterization of the marine treated effluent discharge (including the potential concentrations of substances in the effluent"
- The proposal does not include lobster larvae tests or tests on herring spawning grounds, thereby indicating these effects are **unknown**. This is a particularly glaring omission given that these tests were specifically requested by those directly affected by potential negative effects of the effluent.

- The proposal does not mention the known mercury contamination in the soil and bedrock proximal to the proposed new treatment plant and basins, nor does it acknowledge the potential for disturbing the mercury contamination during construction. (Baxter, J., The Canso Chemicals mystery: With the chemical plant long gone, why is the company still alive? And what about all that mercury pollution?, *Halifax Examiner*, March 7, 2019, <https://www.halifaxexaminer.ca/province-house/the-canso-chemicals-mystery-with-the-chemical-plant-long-gone-why-is-the-company-still-alive-and-what-about-all-that-mercury-pollution/>). Yet, Section 2.5.2 (p.15) of the proposal explicitly identifies that siting decisions of the treatment facility were made with consideration for sensitive environmental features and that mitigation and compensation measures were developed where avoidance was not possible. “NPNS has emphasized project design and siting so that the location and configuration of the project facilities considers the above measures wherever possible so as to avoid or minimize the potential environmental effects of the project. To the extent possible, project facilities have been sited to avoid and reduce interactions with watercourses, wetlands, areas of elevated archaeological potential, and other sensitive environmental features. Where avoidance was not possible, mitigation or compensation measures have been developed as part of the EA, and will be implemented in consultation with the applicable regulatory authorities.” It is a gross oversight that the potential disruption of mercury contamination has not been addressed in the proposal and one can conclude that, on the basis of this proposal, the potential risk of mercury disturbance that, while present, is **unknown**.

- Northern Pulp has exhibited a poor track record with their current pipe, experiencing a number of breaks and leaks in recent years. Northern Pulp’s inability to effectively maintain the integrity of their equipment over time would suggest that the ability of the company to prevent environment damage from effluent pipe breaks in the future is **uncertain** at best, not in keeping with the precautionary principle, and, therefore, too risky a prospect.
- Finally, the new effluent treatment system requires burning sludge, but the proposal does not indicate additional pollution abatement equipment that will be a part of the power boiler stack to minimize environmental impacts of burning something with **unknown** characteristics. This lack of information is particularly troubling given Northern Pulp’s historical problems with the power boiler pollution filtration and the limited stack testing currently required. Furthermore, while Northern Pulp has had permits for test burns of sludge in the past, those test burns offer no assurance the sludge burning with the new system would be safe since effluent processing is entirely different and the sludge will be different given that it will undergo less ‘polishing’.

ii) Some of the information provided in the application is misleading.

Some of the information provided in the application is misleading, specifically with respect to the quality of effluent that will result from the new treatment facility.

- First, in the public information sessions presented by Northern Pulp in December 2017, the effluent quality promised was contingent on Northern Pulp installing an oxygen delignification system. The proposal has been revised since the plans presented in 2017, but the promise of improved effluent quality remains despite oxygen delignification not being part of this proposal. If oxygen delignification is required to achieve the predicted effluent quality as promised, why is it not included in the proposal? And, if the proposal is assessed at face value and approved based upon predicted effluent quality dependent upon oxygen delignification, but oxygen delignification is not proposed, can the facility proceed and have poorer quality effluent as a result?

- Second, Northern Pulp’s promise of improved effluent quality is misleading based upon the company’s own admission in internal communication. Despite publicly claiming the effluent will be better, internal documents acquired by environmental lawyer Jamie Simpson acknowledge that it will, in fact, be worse due to losing the ‘polishing’ time that Boat Harbour

affords. (Jamie Simpson's interview with CBC Information Morning can be accessed here: <https://www.cbc.ca/listen/shows/information-morning-ns/segment/15672343>)

- The two points above refer to promises by Northern Pulp that effluent quality will be improved. Yet, as previously indicated, by the company's own admission, the actual characteristics of marine effluent are unknown. Therefore, it is challenging to understand how a promise of improved effluent quality can be made, if the effluent characteristics are uncertain.

- In addition, the author of one study cited by Northern Pulp in their EA proposal has recently responded to the interpretation of their work within the EA document and have explicitly stated that Northern Pulp has misrepresented its scientific contribution, thereby raising concern about the representation of other studies included in the proposal (Panno, L., [Dalhousie researcher breaks silence over pulp mill's cancer-causing air emissions](https://www.halifaxexaminer.ca/province-house/dalhousie-researcher-breaks-silence-over-pulp-mills-cancer-causing-air-emissions/), *Halifax Examiner*, March 7, 2019, <https://www.halifaxexaminer.ca/province-house/dalhousie-researcher-breaks-silence-over-pulp-mills-cancer-causing-air-emissions/>).

iii) There is a lack of trust that, if the project is approved, Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations.

- Lastly, there is a lack of trust that Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations or adequately monitor the terms and conditions of this environmental assessment, should it be approved. The provincial Auditor General has identified this specific issue as a concern as recently as 2017 where his November 2017 report clearly stated that "Nova Scotia Environment is not monitoring terms and conditions attached to approved projects", (Report of the Auditor General to the Nova Scotia House of Assembly, November 1, 2017, p. 45; https://oag-ns.ca/sites/default/files/publications/FullNov2017_1.pdf). And, using history as a guide, NSE has demonstrated numerous challenges with effectively monitoring Northern Pulp and enforcing the regulations it has imposed as highlighted below.

- Nova Scotia Environment (NSE) has the responsibility of creating and enforcing the rules for Northern Pulp's current effluent pipe, yet there have been at least three pipeline leaks in recent years (2008, 2014 and 2018). And, despite increasing efforts by the regulator to improve pipeline monitoring by the company in response to the recent pipe breaks, those efforts did not result in preventing future leaks.

- The current monitoring and enforcement model employed by Nova Scotia Environment (NSE) requires companies self-report problems and breaches. More than a decade ago, in 2008, a review of NSE by the Office of the Auditor General identified this as an area of concern and recommended that, "The Division should establish procedures to obtain objective evidence to validate the accuracy of monitoring reports received from approval holders". (Recommendation 3.2, <https://oag-ns.ca/sites/default/files/publications/2008%20-%20Feb%20-%20Ch%2003%20-%20Environment%20and%20Labour%20-%20Env%20Mon%20and%20Compliance.pdf>) Yet, the 2017 Report to of the Auditor General to the House of Assembly (https://oag-ns.ca/sites/default/files/publications/FullNov2017_1.pdf) notes that this recommendation had not yet been addressed. As a result of failing to implement a solution per the Auditor General's decade-old recommendation, NSE has proven to have lessened awareness of certain problems and have been unable to minimize what could be preventable environmental damage. Some examples that illustrate NSE's limited objective oversight with respect to Northern Pulp include the following:

- o Northern Pulp had problems with their power boiler scrubber identified to them by a consultant in 2006, but NSE did not become aware of the situation until 2008. Had NSE been

relying on objective oversight, the problem could have been identified much sooner rather than obliviously allowing the company to continue operations.

o Subsequently, NSE issued an industrial approval in 2011 despite the company failing to address their air pollution problems. The Minister of the Environment stated that NSE was unaware of the ongoing air pollution issues when the 2011 Industrial Approval was issued despite evidence to the contrary provided by NSE to the environmental group Clean the Mill (CBC News, Northern Pulp air quality monitors years behind schedule, October 7, 2014, <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-air-quality-monitors-years-behind-schedule-1.2789892>). It was not until 2012 that NSE finally issued a directive to the company to address the problem. This example illustrates a lack of communication within NSE, further reinforces the need for objective information to be used in decision making within the Department in order to prevent damage from environmental regulation violations and further justifies the decreased public trust in NSE's ability to protect the environment.

o When the effluent pipe broke in 2014, NSE grossly underestimated the volume of effluent lost at be 4 to 5 million liters ((CBC News, Northern Pulp charged with releasing effluent into fish habitat, October 14, 2015, <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-spill-charge-1.3270154>). However, the actual volume released turned out to be 47 million liters which was only revealed in court proceedings after a federal investigation (Withers, P., Northern Pulp fined \$225K for 'toxic' effluent pipe leak, CBC News, March 23, 2016, <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-mill-effluent-leak-fine-1.3504203>). NSE has no way to independently monitor the current pipe or that proposed in this EA application not does it have the ability to validate the information reported by the company. As a result, NSE must rely on the face value of information provided by the company, a situation that has proved problematic in the past.

o Despite Northern Pulp's 2015 Industrial Approval requiring the company 'operate and maintain real time flow monitoring equipment ... designed to immediately notify the approval holder in the event of a total loss of flow or a reduction of flow below normal operating conditions', it was a member of the public that identified and reported the most recent pipe leak in October 2018. (Brimicombe, H., Northern Pulp line springs another leak, *The Advocate*, <http://pictouadvocate.com/2018/10/24/northern-pulp-line-springs-another-leak/>).

- Where Northern Pulp's information has proved inaccurate in the case of the 2014 pipe break, was missing in the case of the malfunctioning power boiler scrubber between 2006 through 2008, and the public needed to report the pipe break case of 2018, it seems unrealistic to think that NSE has the capacity to effectively monitor a new pipe and proactively limit environmental risks.

- Over the years, NSE has issued multiple directives to Northern Pulp to correct air emissions violations. Yet, these directives were ineffective at generating an immediate solution. Instead, Northern Pulp was given excessive timelines (often years) to correct problems. If a problem occurs with the proposed pipe or at the proposed new on-site treatment facility, problems need to be able to be identified and addressed immediately not with the excessive timelines we have become accustomed under the current monitoring and enforcement model. There is no amount of time that would be acceptable to fix problems that risk damaging the Town of Pictou's watershed or the commercial fishery.

In summary, I remain wholeheartedly opposed to Northern Pulp's effluent treatment proposal.

Several aspects of the proposal are inconsistent with the principles of sustainable development that are supposed to be protected with the *Environment Act*. The information provided in the proposal documentation is misleading. And, finally, there is a lack of trust that, if approved, Nova Scotia Environment has the capacity to monitor and enforce compliance with regulations.

Sincerely,

Sent from my iPhone

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Environmental Assessment
Date: March 9, 2019 3:42:51 PM

March 9, 2019

Environmental Assessment Branch

Nova Scotia Environment

PO Box 442

Halifax NS B3J 2P8

EA@novascotia.ca

RE: Response to Northern Pulp Nova Scotia
Replacement Effluent Treatment Facility

In response to the proposal from Northern Pulp to pipe effluent into the Northumberland Strait I have several concerns regarding the lack of information provided in this document.

I am not a scientist or engineer, I am a concerned resident who has lived with air emissions that have exceeded the conditions of the IA over the course of that last several years. I have lived through two recent pipe ruptures which have allowed untreated toxic waste to foul the land and water. Both pipe breaks were discovered by individuals while out walking. One resulted in a fine and the investigation is still ongoing regarding the latest spill/breach.

The lack of information regarding what will be discharged is most concerning. As Paper Excellence operates a number of bleached kraft mills throughout the world this information should be readily available and should have been included in this proposal. To state they won't know what will be going into the Northumberland Strait until the system is operational is highly questionable.

What is different in this proposal, submitted by this same mill, from two previously proposals (1990's) regarding piping effluent into the Northumberland Strait which were rejected?

Why is the technology/system presented in this proposal from a mill operation that was never built, rather than one that is operational?

Currently the effluent flowing into Boat Harbour is released into the Northumberland Strait after treatment and 'polishing' for 25 to 30 days. The new system will release effluent into the Northumberland Strait in a matter of hours at a rate of 70-90 million liters of hot liquid and 945 kg of solids every twenty four hours.

There is a great deal of technical theory, not proof in this proposal that there will be no ill effects to the receiving waters (Northumberland Strait) similar to information presented when Boat Harbour was built. Once the effluent was discharged into Boat Harbour every living thing was dead within days and created an environmental disaster that will never be free of toxins even after a multimillion dollar 'clean up'. The receiving waters (over 300 acres) of Boat Harbour contains heavy metals, mercury, zinc, chromium, cadmium, lead, nickel, arsenic, aluminum and vanadium. I cannot trust this same fate will not happen to the Northumberland Strait.

I also have grave concerns regarding the burning of toxic solid waste in an antiquated boiler without constant monitoring. Northern Pulp has an extensive record of noncompliance to their IA conditions when it comes to air emission.

Northern Pulp has presented a proposal that has very little actual fact based information and a great deal of speculation or theory.

I am concerned for the thousands of fisheries related jobs that will be put in jeopardy if an effluent discharge pipe is permitted in the Northumberland Strait. I am concerned the marine environment and ecosystem will be destroyed as well as our tourism industry. But most of all I am concerned with the health and wellbeing of everyone living in Pictou County.

There is far too much at risk to allow this proposal to be approved and I respectfully suggest this proposal should be rejected as presented.

Respectfully Submitted

@ns.sympatico.ca

From: [Environment](#)
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 3:45:23 PM

Project: replacement_effluent_treatment_facility_project Comments: Hello I would like to see northern pulp have a chance to build there treatment plant and operate it. Iâ?Tm an employee for northern pulp and am raiseing a young family in rural Nova Scotia. My wife is a nurse practitioner in Pictou and if northern pulp is forced to shutdown it will force myself and my family to relocate to another province where we can both secure stable work. Thank Name:

Email: Address:

: Privacy-

Statement: agree x: 61 y: 22

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 3:49:24 PM

Project: replacement_effluent_treatment_facility_project Comments: Yes this project should get approved, if we look around Nova Scotia it's clear to see that the province is turning into a retirement community and less industry is looking to set up shop in our province, There is no reason why the fishing industry and pulp/forestry industries cannot both be sustained here in Nova Scotia as they have for the last 50 plus years, there is more than enough science to support the fact that this effluent treatment plant will look after any concerns around environmental upsets as this type of plant is in place in many other places in North America.

Name: Email: @hotmail.com Address:

Privacy-Statement: agree x: 35 y: 28

From:
To: [Environment Assessment Web Account](#)
Subject: [PROBABLE-SPAM] Northern Pulp Pipeline Objection
Date: March 9, 2019 4:14:31 PM
Attachments: [image002.png](#)

To whom it may concern.

I object to the approval of a new pipeline for Northern Pulp (Paper Excellence) for the following reasons:

Northern Pulp has not honestly submitted the all the information available to them.

Namely,

Internal emails that received through a FOIPOP request show that Dillon consultants raised the issue of heavy metals, such as mercury, and of dioxins and furans in the effluent. In January 2018, Dillon sent a list of questions to Northern Pulp, KSH Consulting, and TIR, saying it needed information on the “percentage of dioxins and furans in the final effluent going into the straight [sic] daily.”

In February 2018, Dillon again wrote to Northern Pulp reminding the technical manager of the need to acknowledge these substances, noting that:

... questions have arisen regarding the content of metals in the discharge. Based on available data ...[redacted] will review potential metals or other effluent components levels in the context of potential marine environmental risk ...

And:

We believed [sic] that an understanding of effluent characteristics regarding metals, dioxins and furans will be necessary.

Also, the new pipeline necessitates the burning of solid waste through their already inefficient burner systems creating further air pollution. The current air pollution according to a Delhousie study is already a significant health hazard to the general population in the area.

Please read the following article,

Dalhousie researcher breaks silence over

pulp mill's cancer-causing air emissions

MARCH 7, 2019 BY [LINDA PANNOZZO](#) **6 COMMENTS**

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Dalhousie University researcher Emma Hoffman has come forward to defend her 2017 [ambient air quality study](#) about cancer-causing air emissions detected near the Northern Pulp mill after finding that her study was “misrepresented” in the mill’s recently registered [Environmental Assessment](#) [EA] for its proposed effluent treatment facility. ¹

In [Part 3](#) of the “Dirty Dealing” series, I reported that a study by Hoffman and five other Dalhousie University researchers revealed that air levels of three of the seven volatile organic compounds (VOCs) assessed near the Northern Pulp mill exceeded cancer risk thresholds.

Over an eight-year period (2006-2013), 1,3-butadiene, benzene, and carbon tetrachloride were found to routinely exceed US Environmental Protection Agency (EPA) cancer-risk levels, which refer to the probability of contracting cancer if exposed to a concentration of a substance every day over the course of a 70-year lifetime.

According to the public and peer-reviewed study published in *Environmental Science and Pollution Research* — one of the few on record about airborne VOCs in rural Canada — many VOCs are either known or suspected of having direct toxic effects on humans, ranging from carcinogenic to neurotoxic and that “combinations of air toxics may have additive or synergistic adverse health effects.” By analyzing the available data, the study authors were able to show that the Abercrombie pulp mill (currently Northern Pulp) was a likely source of the contaminants.

At the time, I contacted both Emma Hoffman and Tony Walker, two of the lead researchers, to ask about their work but neither were able to speak to me. They both cited “ongoing consultations” with the [Boat Harbour Remediation Project](#). Hoffman said she was unable to speak “due to the sensitivity of the subject matter.” Both are members of the Boat Harbour Environmental Advisory Management Committee (BHEAC), which was formed in 2016 after the governing Liberals set in law the January 2020 closure of Boat Harbour as Northern Pulp’s waste lagoon. At the time, the provincial department of Transportation and Infrastructure Renewal handed over the responsibility for the remediation of Boat Harbour to Nova Scotia Lands Inc., a crown corporation, which is now the proponent of the project.

Minutes obtained from the BHEAC meetings dating back to 2016 indicated at the time that the consultants, including Hoffman, were instructed to avoid speaking publicly since the subject matter was “sensitive... until [the] strategy is finalized.”

Emma Hoffman, from her LinkedIn page.

But Hoffman, who is still involved with separate Nova Scotia Lands-funded studies, has decided to speak publicly now, given that the ambient air study was not funded by the province. She also said she wanted to “defend” the study “due to the misrepresentation put forth by [Northern Pulp’s] Environmental Assessment of the scientific contributions it

provides.”

Hoffman’s full statement provided to me in response to Northern Pulp’s EA [can be found here](#). Her supervisors and study co-authors, Dr. Judith Guernsey and Dr. Tony Walker also contributed to her statement. ²

Northern Pulp says Hoffman’s study is flawed

The Northern Pulp EA says that the limitations of the study make it impossible to point definitively at the pulp mill as being the source of the VOC emissions. It says that while the seven VOCs referenced in Hoffman’s 2017 study “may be emitted in small amounts in stack and fugitive emissions at the NPNS mill...a number of other point and mobile local sources also emit these substances within the local airshed.”

In response Hoffman, Guernsey, and Walker say that the study was a “pilot” and “was not intended to provide causal evidence to implicate the mill as the sole source of the VOCs. Nevertheless, the study was able to show a very plausible association.

By analyzing publicly accessible emissions data from a provincially operated [National Air Pollution Surveillance](#) (NAPS) monitoring site located in Granton, southwest of the mill and combining this with local meteorological conditions at Caribou Point, Hoffman and her colleagues were able to show a positive correlation with wind direction and the Granton NAPS site’s ambient VOC concentrations in relation to the location of the pulp mill. In other words, when the prevailing winds were blowing from the mill toward the Granton air monitor, the VOC concentrations typically went up for all of the compounds assessed, except carbon tetrachloride, suggesting that the mill is likely a contributor to the increased concentrations. “The largest point source emitter northeast of the Granton NAPS site is likely the mill,” she says, but “the origin(s) of the VOCs are inconclusive.”

Northern Pulp’s EA also stated that the study did not attempt to rule out the contributions of other potential sources. But Hoffman, Guernsey, and Walker say this “is clearly not a true statement,” and that the study did not disregard other potential sources of VOC emissions. The study openly acknowledged and discussed in detail the other potential local emission sources in the area, including a coal-fired generating station in Trenton and a tire manufacturing facility. The study even provided a map indicating these other potential sources relative to the Granton NAPS site.

Study Findings Warrant Further Investigation, says Hoffman and co-authors

Northern Pulp’s EA states that “When other study uncertainties are considered... there is no current air quality issue with the seven targeted VOCs in the Pictou area.” Hoffman and her colleagues say this statement is “misleading.”

They say that despite some of the study limitations — including a limited number of air sampling sites in relation to the mill and the short duration of the study — the fact that VOCs routinely exceeded EPA air toxics-associated cancer risk thresholds, regardless of whether the mill contributed to these VOC levels, should not be ignored. “Absence of evidence is not necessarily evidence of absence,” they say. “The limitations caused by sparse data does not necessarily mean there is no problem with air emissions in this community and there is no justification for [Northern Pulp’s] erroneous conclusion.”

Instead of more ambient air data, particularly in areas where there is higher residential exposure to the mill's toxic emissions, there appears now to be less. In 2015 Environment and Climate Change Canada (ECCC) decided to decommission the Granton NAPS site, the only one in Pictou County that measured VOCs.

According to the Nova Scotia Department of Environment, the Granton site was decommissioned after the feds analyzed 10 years of data and determined that the average annual levels of VOCs picked up by the monitor were "below or comparable to average levels" over time, elsewhere in Canada.

But air monitors are stationary devices meant to measure contaminants in outdoor (ambient) air. When they are located properly, like in Halifax where there is a relatively steady pollution source (cars), they can indicate levels of pollutants, like smog, quite accurately. But not so when it comes to "point sources," like the mill. One of the limitations with accurately measuring ambient point source contaminants is there is often a lot of variability.

When there were northeast prevailing winds blowing from the mill toward the Granton NAPS site, higher concentrations of VOCs were typically captured. But when the wind was blowing in another direction, it wasn't. So the high levels — the ones that routinely exceeded the cancer-risk thresholds, with the exception of carbon tetrachloride, reported by the Dalhousie researchers — were averaged down by the lower concentrations when the wind was blowing in other directions. That doesn't necessarily mean there were lower VOC concentrations in the surrounding community; it means that VOCs were likely blowing where they could not be captured by the Granton NAPS site.

The study also found that the prevailing winds (southwest) that blow toward the town of Pictou dominate during the summer months, when "people are more vulnerable to ambient air pollution exposure." In fact, because of Pictou's geography, air toxics from across the Eastern Seaboard of the United States converge with the local emission sources, including the mill, and as a result higher VOC concentrations are expected in Pictou in the summer.

The study authors point out that given Pictou's considerably larger population base, compared to the rural area of Granton, there is a need for "installing and maintaining additional strategically placed NAPS sites," to more accurately represent levels of air toxics where there is higher residential exposure.

Hoffman and her colleagues say that decommissioning the air monitor left an "information vacuum" and "only emphasizes the need for more research on these questions."

What is the cancer risk?

Northern Pulp's EA points to the study's use of USEPA cancer risk levels, which are expressed as 1-in-1 million, saying that the study authors should have adjusted the values to 1 in 100,000, in keeping with "current public health policy in Nova Scotia and most other provinces." Northern Pulp argues that this "correction would alter the conclusions of the study substantially," and that the exceedances would have been "negligible."

This will take a few steps to unpack.

First, Hoffman and her colleagues say this criticism is not relevant “given that Health Canada has no formal standards for air toxic emissions.” Many agencies and provinces use an increased chance of 1-in-1 million for expressing cancer risk.

Since there are no air toxics standards in Canada, the study authors turned to the US and the Environmental Protection Agency’s [National Air Toxics Assessment](#) (NATA), which calculates concentration and risk estimates from a single year’s emissions data. ³

The NATA risk estimates assume a person breathes these emissions each year over a lifetime (or approximately 70 years), and establishes an air concentration value when excess cancer is observed. Hoffman, Guernsey, and Walker say the US NATA process is based on a 2005 scientific risk assessment process that established the cancer risk levels to which they compared the ECCC data. ⁴

To illustrate, let’s take benzene as an example. The [International Agency for Research on Cancer](#) (IARC) has classified benzene as a Group 1 agent, which means it is “known” as being carcinogenic to humans. According to [Carex Canada](#), a national carcinogen surveillance program that was established in 2007, there is no safe exposure level for benzene.

Hoffman’s study used the US EPA estimate that if an individual were to continuously breathe the air containing benzene at an average of $0.13 \mu\text{g}/\text{m}^3$ over his or her lifetime (roughly 70 years), that person would have no more than one-in-a-million increased chance of developing cancer as a direct result of breathing benzene. If the exposure level goes up, so does the risk.

So, if the numbers for benzene, say, were adjusted to one-in-100,000, as Northern Pulp suggested, this would effectively increase the value ten-fold from $0.13 \mu\text{g}/\text{m}^3$ to $1.3 \mu\text{g}/\text{m}^3$ — meaning that if an individual were to continuously breathe air containing $1.3 \mu\text{g}/\text{m}^3$ for a lifetime that person would have no more than one-in-100,000 increased chance of developing cancer.

But increasing benzene’s threshold concentration, as Northern Pulp suggests, does two things.

First, it does exactly what Northern Pulp said it would do: expressing cancer-risk levels as one-in-100,000 means that benzene concentrations detected at the Granton NAPS site would have been close to negligible.

But Hoffman and her colleagues point out it also does something else: It effectively increases the allowed ambient air concentration for benzene, a chemical for which there is no safe exposure. Therefore, the threshold is “less protective” of human health, they say.

In defence of the study, Hoffman, Guernsey, and Walker also noted that it met all the quality control standards of *Environmental Science and Pollution Research*, the internationally-recognized, environmental science peer-reviewed journal in which it was published.

Boat Harbour could be adding to the problem

Northern Pulp’s EA also states that the seven VOCs cited in the ambient air study “are not

known (based on literature review) to be associated with pulp and paper mill activities and air emissions to any significant extent.”

However, the study notes that the mill’s own self-reported data show otherwise. [National Pollutant Release Inventory \(NPRI\)](#) data showed that in 2012 the company emitted 143 tonnes of VOCs from its stacks. In addition, an estimated 3.2 tonnes of benzene were released to the air from a stack higher than 50 metres, and 0.02 tonnes were released within 50 metres of the ground.

Hoffman, Guernsey, and Walker tell me that what’s also worrying is that benzene can combine with chlorinated hydrocarbons associated with the Kraft bleaching process to form a range of toxic compounds which can become airborne. The study points out that although trichloroethylene, tetrachloroethylene, and carbon tetrachloride were not officially reported to have been released by Northern Pulp, these toxic VOCs “may become airborne through evaporation from pulp and paper wastewater.” ⁵

In other words, Boat Harbour — the mill’s current effluent lagoon — could also be contributing to ambient concentrations of VOCs.

Despite a long history of non-compliance with regards to air emissions at the mill, and without providing any evidence of its own, Northern Pulp’s EA simply concludes that when it comes to the seven targeted VOCs in the Pictou County area, “there is no current air quality issue.”

It’s a statement that rings hollow given that the company has failed repeatedly and spectacularly when it comes to pollution emission tests.

For instance, in 2014 the mill reported the release of 1,290 tonnes of fine particulate matter — the equivalent of 13 Irving pulp mills in one location. A lot of the excess particulate pollution at the time was blamed on a faulty electrostatic precipitator (ESP) in the recovery boiler — which was replaced in 2015 — but this still didn’t address the issue of combustion gases, including VOCs. While all of the stacks at the mill would emit the cancer-causing substances, most would be coming from the recovery boiler, where the “black liquor” — the waste from the Kraft process — is burned to recover the sodium and sulphides, dispose of the unwanted dissolved wood components, and generate steam. ESP units are not designed to remove combustion gases. To do that you need properly functioning scrubbers, but the 50-year old scrubber in the recovery boiler is well past its best-before date and can’t handle the high levels of pulp production now common at the mill.

Add to all this the fact that issues with the power boiler, first noted to be problematic in 2006, have never been addressed. Particulate matter emissions have been exceeded from that aging stack on numerous occasions, which is particularly disconcerting when we consider that the mill is planning on using it for a key part of its proposed effluent treatment plan: the “dewatered sludge” that would be a product of the activated sludge treatment process it proposes will be “burned along with bark in the mill’s power boiler, which reduces or eliminates the problem of landfilling,” according to the mill.

Not knowing what chemicals will be in the sludge, coupled with a glaring lack of properly functioning pollution-abatement equipment in the stack that will be burning it, could spell much worse air quality for local residents.

I ask Hoffman what she thinks about burning the sludge in the power boiler. While she concedes that she doesn't have "experience" with this matter, or "the knowledge of how these emissions produced by incineration would be mitigated or controlled for," she doesn't think it's a good idea.

Incineration of the sludge could result in emissions of "compounds of concern," such as heavy metals and other VOCs, she says, and "there are no standards in Nova Scotia to apply against these emissions." She notes that there are studies that investigate the recycling of pulp and paper mill sludge, but doesn't know if such practices would be "feasible" at Northern Pulp.

According to Hoffman, the intent of the ambient air study was to increase awareness and encourage government to "adopt more stringent air quality regulations and monitoring programs to ensure health of all citizens is safeguarded and prioritized."

In addition to the ambient air study, Hoffman was lead author on another 2015 [study](#) that highlighted the environmental impacts and lack of compliance at the mill. While Hoffman's work as a researcher with Dalhousie's School for Resource and Environmental Studies has specialized in investigating industrial pollution impacts on human and environmental health, it has been particularly focused on the reality of living near a pulp and paper mill and that's because for Hoffman, the mill is personal. She is from Pictou and says she has "a vested interest in issues surrounding local industry."

The abstract to the 2015 study concluded that, "After decades of local pollution impacts and lack of environmental compliance, corporate social responsibility initiatives need implementing for the mill to maintain a social license to operate."

That expiration date appears to be fast approaching.

Linda Pannozzo is an award-winning freelance journalist and author of two books: *The Devil and the Deep Blue Sea* (2013) and *About Canada: The Environment* (2016).

Notes:

1. A critique of the Hoffman et al. (2017) ambient air quality study can be found on pp. 504-505 of Northern Pulp's Environmental Assessment Registration Document.
2. Hoffman's supervisors from the School for Resource and Environmental Studies — Dr. Judith Guernsey in the Department of Health and Epidemiology and Dr. Tony Walker — contributed to her statement and responses to my questions.
3. Furthermore, at the federal level there are no legally binding guidelines for air pollution, only voluntary guidelines. The *Canadian Environmental Protection Act* (CEPA) outlines national air objectives and emissions standards for certain industries, but nothing is legally enforced, unlike the US, UK, and the EU, where national air quality standards do have legal teeth.
4. According to the US EPA [Health Effects Fact Sheets](#), cancer risk when it comes to hazardous air pollutants is "the inhalation unit risk for a chemical, which is the increased probability of a person developing cancer from breathing air containing a specified concentration of the chemical for a lifetime. The inhalation unit risk is derived using mathematical models that assume a non-threshold approach; i.e., there

is some risk of cancer occurring at any level of exposure...The risk-based concentrations corresponding to a one-in-a-million, one-in-a-hundred thousand, and one-in-ten thousand excess risk attributed to exposure to the chemical are presented. This means that EPA has estimated that, if an individual were to breathe air containing these concentrations of the chemical over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million, one-in-a-hundred thousand, or one-in-ten thousand increased chance of developing cancer as a direct result of breathing air containing the chemical.”

5. In Hoffman et al. (2017) the reference provided is: Soskolne CL, Sieswerda LE (2010) Cancer risk associated with pulp and paper mills: a review of occupational and community epidemiology. *Chronic Dis Can* 29:86–100.

Finally.

The intended path of the pipeline goes over the water table that feeds Pictou town, If this pipe is ruptured by fair means or foul, the effects to the community would be significant. It could be that land shift or tree roots may rupture the pipe or perhaps more sinister, the strength of feeling against this project may attract more militant action. I believe that it would be implausible to maintain security of this facility.

Sincerely

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 4:23:49 PM

Project: replacement_effluent_treatment_facility_project Comments: Dear Mr., Mrs. I moved here in New Glasgow, Pictou County, come work at Northern Pulp and I brought my family with me. We bought a house and become members of the community. My kids were born here and they are now in school. I am expecting the government to work with the owner to complete the new effluent treatment plant and finally close the Boat Harbour saga once for all. The price to pay to lose one of the biggest employer in Nova Scotia is too high to quantify without talking about the collapse of the forestry if the mill goes down. I personally experienced a mill closure in my hometown 15 years ago and I do not wish that on anyone. The rural Nova Scotia needs young families and not only retired people. The new ETF will have the best technology available to treat the effluent and I am expecting a fair and objective review of Northern Pulp application based on proven science and not only on people personal opinions. This province need to attract new employers but a lso need to work with the existing ones to build a long and prosperous future. Lets build a better future for our younger people to have a chance to stay at home and have good paying jobs in the private sector. Best regards, Mechanical engineer Name: Email:

Privacy-Statement:

agree x: 42 y: 16

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Environmental Assessment
Date: March 9, 2019 4:57:36 PM

Hello,

I own a property in Pictou County - Braeshore to be precise and I grew up with that pulp mill across the harbour. It seemed like people coped with the situation because it brought jobs to our diminishing part of the province. But after more than 50 years and living with chronic illness and life threatening diseases like cancer, people have run out of patience for a government that appears to be in a conflict of interest with this whole situation. My request is a simple - we need to have a federal environmental assessment completed. The logic points to this as the next step in this process. It is the right thing to do and wouldn't you say that now is the time for the Government of Nova Scotia to finally do what is fair and just for the citizens of Pictou County and its precious environment?

Sincerely,

Sent from my iPhone

From: @eastlink.ca
To: [Environment Assessment Web Account](#)
Subject: Public Response to Department of Environment - Northern Pulp Replacement Effluent Treatment Facility Project
Date: March 9, 2019 5:27:46 PM
Attachments: [Letter to Margaret Miller Northern Pulp Replacement Effluent Treatment Facility Project.FINAL.pdf](#)

Honourable Margaret Miller

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, NS, B3J 2P8

March 9, 2019

Hon Minister Miller,

I am writing in response to the proposal submitted to the Department of Environment regarding the Northern Pulp Replacement Effluent Treatment Facility Project.

My name is _____ I am a resident living in Pictou except for 3.5 years as a resident of Iqaluit and Yellowknife. I come from a fishing family including past and present and today my brothers' fish in the Northumberland Strait for lobster, crab, herring, and scallops. I spent my summers as a youth at Caribou Island and now spend summers at my husband's family cottage at Waterside.

I served as a Town of Pictou citizen representative on the Town of Pictou Ramsay Report Committee _____ The Town of Pictou Organization Study was completed by Richard G. Ramsay Management Consultants Inc. to address the Town of Pictou's fiscal situation and develop a strategy toward a number of areas including residential, business development in the town of Pictou, increased quality and deliver of water services including our watershed and improved Town services and support to tourism, culture and community organizations.

Source: <http://pictouproud.com/Portals/18/documents/20.ramsayfinal.pdf>

My submission to you will include three topic areas:

1. The watershed for the Town of Pictou and surrounding community of Caribou
2. The proposed burning of sludge at the Northern Pulp site
3. The impact of the effluent dumped into the Northumberland Strait.

First of all I have to say the one month timeline for the public to respond has been a challenging one. I did my best to study this document. It has been a number of emails and follow-up with others for interpretations.

I also believe that the Department of Environment has an enormous task to respond to Northern Pulps Replacement Effluent Treatment Facility Project by March 29. I wish you and your staff

the best in sorting through what is a deep read and with tangled information, vague outcomes, contingency risks, and what I see no contingency plans to address those risks.

Focus 1: The watershed for the Town of Pictou and surrounding community of Caribou

Part of the Town of Pictou Ramsay Report Committee objective was to provide a plan toward improved drinking water services and risk management as it relates to water quality for Town of Pictou residents. Most recently a new water treatment plant was completed and opened in October 2018.

A document prepared for the Province of Nova Scotia, Department of Environment by the Caribou Source Water Protection Committee Members can be found online at <https://www.townofpictou.ca/assets/PDFs/Water/Pictou-SWPP-Update-October-2017.pdf>

This document states in its introduction that: ***“Water is a provincial resource and regulated by Nova Scotia Environment (NSE) under the Environment Act. All Municipalities are required to obtain an approval from NSE to withdraw from water sources (i.e. groundwater and surface water) in Nova Scotia. The Town of Pictou (Town) holds water withdrawal approvals for both the Caribou and Pictou well fields and an Approval to Operate (Approval) for their water treatment and water distribution system from NSE under the Activities Designation Regulation. The Approval details the operational conditions for the Town to ensure compliance with the Environment Act. Included are provisions for the Town to develop a source water protection plan (SWPP).”***

This introduction clearly states that our drinking water source is regulated by the Nova Scotia Environment (NSE) under the Environment Act and that Approval to Operate for our water treatment and water distribution system. It goes on to state that: ***“In 2002, Nova Scotia Environment (NSE) introduced its Drinking Water Strategy to ensure clean drinking water for all Nova Scotians. The main goal of a Water Utility is to provide safe, clean drinking water to its customers. Protecting the quality and quantity of the source water is a top priority for utilities as one-step in the multiple barrier strategy developed for the protection of drinking water quality in Nova Scotia.”*** I interpret this to be the Department of Environment's responsibility and role to Nova Scotia citizens and communities.

The Town of Pictou who is in the business of providing services to its residents and businesses and the Municipality of Pictou County whose residents have private wells in that watershed, all must follow the guidelines/rules outline in the Pictou / Caribou Source Water Protection Plan.

The risks to water quality were identified as transportation, residential development, waste disposal, agriculture, **industrial development**, and recreation and environmental.

The procedures for development of the Pictou / Caribou Source Water Protection Plan are:

- 1) Form a Source Water Protection Advisory Committee (Committee);
- 2) Delineate a Source Water Protection Area Boundary;
- 3) **Identify Potential Contaminants and Assess Risk;**
- 4) Develop a Source Water Protection Management Plan; and

5) Develop a Monitoring Program to Evaluate the Effectiveness of a Plan.

I will focus on **#3 Identify Potential Contaminants and Assess Risk;**

Almost every activity on the land has the potential to affect the quality of water in a community. The Town of Pictou focuses on the following to protect its watershed:

Acquisition of Land: *“The acquisition of land by the Town gives direct ownership and control of portions of the source water area to the Town. This allows for a high level of protection of a source area due to direct control over the activities that can take place there.”(Page 19)*

Best Management Practices (BMP's): *“These standardized and widely accepted practices for activities and products are the most **practical and effective means of preventing or reducing contaminants from reaching source water.** BMP's have been developed for most activities, which occur in a well field. They can be applied to various aspects of residential development, including septic system and oil tank installation and maintenance, and construction activities. Most aspects of agriculture have operating BMP's in place through a variety of regulatory and market driven processes. Many of these practices are specifically designed to manage specific activities, which may affect water quality. BMP's are also in place for many industrial products, services, and activities related to motorized recreation and transportation.” (Page 19)* For an effluent pipe to go through this watershed and with only one break in that pipe and it will happen, the province of Nova Scotia will have Boat Harbour #2 happen again.

The Town of Pictou recently opened its own \$5.8 water treatment plant, which includes a state-of-the-art system that will eliminate the town's ongoing brown water issues, caused by high levels of magnesium and iron, for many years.

The treated effluent pipe is proposed to go through our watershed to Caribou Harbour. How will we know the precautions are being enforced based on the years of cracked pipes and effluent spills with the most and the most recent spill on Oct. 21, 2018? What will happen when that pipeline has a break? There will be a break at some point in this lifespan. This happens in every building, machinery and industry.

Northern Pulp has a failed history of this happening at last date October 21, 2018 only found by local residents, not NP staff or equipment. We have yet to receive a statement from the Province of Nova Scotia releasing three key pieces of information including: 1.the size or cause of the leak in October 2018, 2.the composition of the effluent that leaked and 3.why the pipe break went initially undetected by the pulp and paper firm owned by Paper Excellence. This is very troubling.

With our history, how will we ever trust the water coming out of our taps with the lack of transparency and accountability with effluent in an expanded watershed? Effluent coming through our facets will not have a taste. It is when it shows up in skin conditions, on-going health issues and diagnoses of cancer then it will be noticed and that is too late. There are families, individuals, business that will be impacted. Our water source for drinking, bathing, recreation, restaurants, tourism and basic living services such as food (including our local grocery store Sobeys) cannot operate without a daily, safe water resource. We will be living in a comparison

to on the poem of “The Rime of the Ancient Mariner” by the English poet Samuel Taylor Coleridge of “water, water everywhere and not a drop to drink,” only our salt water will be our toxic, effluent watershed.

Do we want a Pictou, Nova Scotia version of Walkerton? With this effluent going through our watershed we will get it. *“The situation in Walkerton, Ontario, in May 2000 is nothing less than a human tragedy. The outbreak of E.coli, which killed seven residents and left 2,300 people sick, was shocking and frightening for the people in the area. For six long months the town’s 5,000 residents had to rely on bottled water and the treating of tap water with bleach, with many going to homes of friends and relatives in neighbouring communities to bathe. Six months after the tragedy unfolded, the town still suffered under boil water advisory.” Even after the water was declared safe to drink in December of 2000, many people still felt uncomfortable using what comes out of the tap. Their trust and belief in the water system is seriously eroded. The Walkerton tragedy is a serious reminder of what many Canadians take for granted – the value of clean and safe drinking water.”*

Source: <https://www.peelregion.ca/pw/waterstory/pdf/activities/case-study.pdf>

Focus 2: The proposed burning of sludge at the Northern Pulp site

The proposal states: *Emissions during construction are generally related to the generation of dust from earth moving activities and unpaved temporary access roads, and routine combustion gas emissions from construction equipment. Equipment used for construction will generally consist of dump trucks, excavators, wheeled loaders, bulldozers, and other mobile equipment, similar to what may be seen on many other commercial or industrial construction sites. Control measures, such as use of water sprays on roads during dry periods or other dust suppression techniques, will be used as required to reduce the fugitive dust, and routine inspection and maintenance of construction equipment as well as the implementation of a no-idling policy will reduce exhaust fumes. Waste wood may be mulched and spread on access roads. The burning of waste brush/slash material or grubblings will not be permitted. (Page 85- 5.0 Project Description- DILLON CONSULTING LIMITED)*

Sludge Management System

Waste process sludge from primary and secondary treatment (clarifiers) will be sent to a single sludge holding tank located within the AST building....Burning sludge in this manner reduces the potential for methane emissions from the ETF process and partially displaces the use of fossil fuel that would otherwise be burned in the power boilers for energy production. (Page 81- 5.0 Project Description- DILLON CONSULTING LIMITED)

*“The “dewatering process” of the sludge from the treatment facility will work well, and there is no need to worry about burning it in the mill’s power boiler, even though that boiler has already caused many **emissions problems.**”* <https://www.halifaxexaminer.ca/province-house/northern-pulps-environmental-documents-missing-mercury-a-pulp-mill-that-never-was-and-oodles-of-contradictions/>

Additional information in a link from the above article as reported by the CBC - Northern Pulp flunks air emission tests — again Paul Withers · CBC News · Posted: Sep 19, 2017 6:30 AM AT | Last Updated: September 19, 2017 <https://www.cbc.ca/news/canada/nova-scotia/northern-pulp-air-emission-tests-fails-again-1.4295686>

“This is the third year in a row emissions from the power boiler at the Northern Pulp mill exceeded the limits set down by the Environment Department. In June, tests recorded particulate emissions of 224 milligrams per reference cubic metre. The boiler permit allows 150 mg/Rm3.”

The proposal has toxic sludge being burned on site in a power boiler that is inconsistent with proper disposal of waste.

In the Town of Pictou, we have a Town of Pictou Outdoor Fire By-law that states:

No person shall have an Outdoor Fire except in an Acceptable Fire Pit, Outdoor Furnace, or for which a Fire Permit has been obtained from the Fire Chief, Fire Inspector or his Designate in accordance with Schedule A herein, and in accordance with conditions as follows:

a. no materials, articles or substances shall be burned excepting Seasoned Firewood or charcoal;

b. an Acceptable Fire Pit shall be located in excess of twenty-five (25) feet from any Building, flammable structure, combustible material or property line;

c. notwithstanding 5 (b), a Chimenea may be operated on a wooden deck provided:

i. it is positioned on a CSA approved fire-proof pad that extends at least eighteen (18) inches from where the door is located and eight (8) inches on all other sides;

ii. it is seven (7) feet from the house and three (3) feet from any wooden surface that is not appropriately screened with a CSA approved fire-proof material;

iii. the operation of a Chimenea meets any standards detailed in the operating instructions accompanying the device;

This means we cannot have a fire pit in our back yard unless it meets the bylaw standards of the Town of Pictou. Yet we will be allowed to breathe in toxic waste from a pulp mill across the harbour. Isn't it ironic?

Source: <https://www.townofpictou.ca/assets/PDFs/Town-Hall/By-Laws/Outdoor-Fire-By-law-Approved.pdf>

Focus 3: The impact of the effluent dumped into the Northumberland Strait.

In the document, **Canada's Challenges and Opportunities to Address Contaminants in Wastewater Supporting Document 2, Wastewater Treatment Practice and Regulations in Canada and Other Jurisdictions** – Environment Canada, March 2018, it states on **page 8**, under the header: **1.2 Regulatory structure for wastewater treatment**, the following states:

–The primary federal tool to control the wastewater releases is the Fisheries Act. Within the Fisheries Act, Environment and Climate Change Canada (ECCC) administers the key pollution prevention provisions (subsections 36 (3) to (6)), which prohibit the deposit of deleterious substances in water frequented by fish, unless authorized by regulations (Environment and Climate Change Canada, 2017a). A deleterious substance may be any substance that degrades or alters water quality such that it could be harmful to fish, fish habitat, or the use of fish by people. Under the pollution prevention provisions, ECCC administers and enforces several regulations, such as those governing effluents from pulp and paper mills, metal mining operations, and municipal wastewater. The Wastewater Systems Effluent Regulations (WSER; SOR/2012-139) establish baseline municipal effluent quality standards for suspended solids (SS), carbonaceous biochemical oxygen-demanding material (CBOD), total residual chlorine, and un-ionized ammonia (NH₃), as outlined in Table 1.1. These regulations impose minimum standards for municipal effluent quality nationwide, and are intended to be achievable through secondary wastewater treatment or equivalent.

This continues with the following information on page 9: *“In addition to the Fisheries Act, the Canadian Environmental Protection Act (CEPA) is also used to prevent and manage risks posed by toxic and harmful substance. This legal framework may contribute to improved wastewater effluents by controlling substances that are otherwise difficult to treat (CCME, 2009). Under CEPA, owners or operators of wastewater treatment facilities that meet reporting requirements are required to report discharges to the National Pollutant Release Inventory (NPRI), which is a publicly accessible inventory of pollutant releases. NPRI tracks releases of several substances associated with municipal wastewater, such as ammonia, chlorine, metals, phosphorus, and greenhouse gases. However, reporting to the NPRI is only mandatory for facilities in which employees work a total of ≥20,000 hours during the calendar year, thresholds for specific substances are met, or total discharges exceed 10 000 m³ /day (Environment and Climate Change Canada Change, 2016). Because only about 200 WWTPs (out of ~3500) across Canada meet these requirements (Holeton et al., 2011), the contaminant releases shown in this database represent only a subset of the total contaminant loads released into the environment from wastewater treatment facilities.”*

The Northern Pulp proposal states: *The group also visited two NBSK pulp mills that operate Veolia BAS™ treatment systems (Södra Cell Värö mill in Väröbacka, Sweden and the Södra Cell Mörrum mill in Mörrum, Sweden) in May 2018. Both of these mills successfully manage the BAS™ treatment system to meet applicable regulations and have ocean discharges for their treated effluent. These visits confirmed that the proposed Veolia BAS™ treatment system will provide the required treatment needs for NPNS to meet current and an anticipated future regulations.” (Page 64 - 4.0 Project Justification and Alternatives Considered - - DILLON CONSULTING LIMITED)*

–There is an increased project risk due to lack of reliability in disposal: weather conditions, vehicle maintenance/problems, and appropriate staffing redundancy to accommodate volume of discharge. There will be a significant increase in truck traffic, which will increase noise and potentially the risk to public safety.” (page 67- DILLON CONSULTING LIMITED).

The report goes on to state: *“Use of a pipeline increases the reliability of disposal as it is not as subject to weather conditions and staffing as trucking. Additional infrastructure may be necessary, including additional pumping and length of pipe, which includes risks of potential failure. NPNS may be required to purchase/lease additional land to construct a pipeline. Additional approvals and studies will be necessary.” (page 67- DILLON CONSULTING LIMITED).*

If I read this correctly, then piping effluent through a watershed into a final drop off into prime fishing grounds and for ocean currents to carry it out into the large mass of Northumberland Strait is a better plan? Let’s look at some of the materials that will be in that effluent.

The method that’s used at Northern Pulp will create chlorinated pollutants such as chloroform, dioxins and furans and other contaminants released include, heavy metals such as mercury, zinc, cadmium chromium, along with organics, alkyl phenols and oxygen depleting nutrients. I will address two of the nine pollutants stated above from this article:

Source: Report shows heavy metals in pulp mill effluent, Cape Breton Post, Published: Nov 07, 2014 at midnight, Updated: Oct 02, 2017 at 11:27 a.m.

<https://www.capebretonpost.com/news/local/report-shows-heavy-metals-in-pulp-mill-effluent-7486/>

Mercury in the food chain:

Source: NORTHERN PULP’S ENVIRONMENTAL DOCUMENTS: MISSING MERCURY, A PULP MILL THAT NEVER WAS, AND OODLES OF CONTRADICTIONS - MARCH 5, 2019 BY JOAN BAXTER <https://www.halifaxexaminer.ca/province-house/northern-pulps-environmental-documents-missing-mercury-a-pulp-mill-that-never-was-and-oodles-of-contradictions/?fbclid=IwAR1O3kOUAvSC5KFq-pHKBjYEpK1dwa2oImkWOoITHpaaFEDCkH8BYaE-b6o#Missing%20answers,%20missing%20mercury>

Source: <https://www.canada.ca/en/environment-climate-change/services/pollutants/mercury-environment/health-concerns/food-chain.html>

Mercury in the Food Chain: The Government of Canada website states in its introduction to mercury in the food chain that, *–Almost all mercury compounds are toxic and can be dangerous at very low levels in both aquatic and terrestrial ecosystems. Because mercury is a persistent substance, it can build up, or bioaccumulate, in living organisms, inflicting increasing levels of harm on higher order species such as predatory fish and fish eating birds and mammals through a process known as “biomagnification”... “In the environment, particularly lakes, waterways and wetlands, mercury can be converted to a highly toxic, organic compound called methylmercury through biogeochemical interactions. Methylmercury, which is absorbed into the body about six times more easily than inorganic mercury, can migrate through cells which normally form a*

barrier to toxins. It can cross the blood-brain and placental barriers, allowing it to react directly with brain and fetal cells.”

“The most important pathway for mercury bioaccumulation is through the food chain, as illustrated in the figure below. In the water, plants and small organisms like plankton take up mercury through passive surface absorption or through food intake. For "autotrophic" organisms (which do not eat other organisms), passive absorption is the only route of exposure. The amount of mercury that results in these species from even a lifetime of passive absorption is not generally harmful to the organism. On the other hand, heterotrophic organisms (animals which eat other life forms) may be exposed to dangerous concentrations via a second route. Methylmercury biomagnifies through the food chain as predators eat other organisms and absorb the contaminants that their food sources contained. Over time, an individual who consumes plants or prey contaminated with methylmercury will acquire levels greater than in either its habitat or its food. **As a result, top predators acquire greater body burdens of mercury than the fish they consume.**” The top predator is “We”, the human consumer.

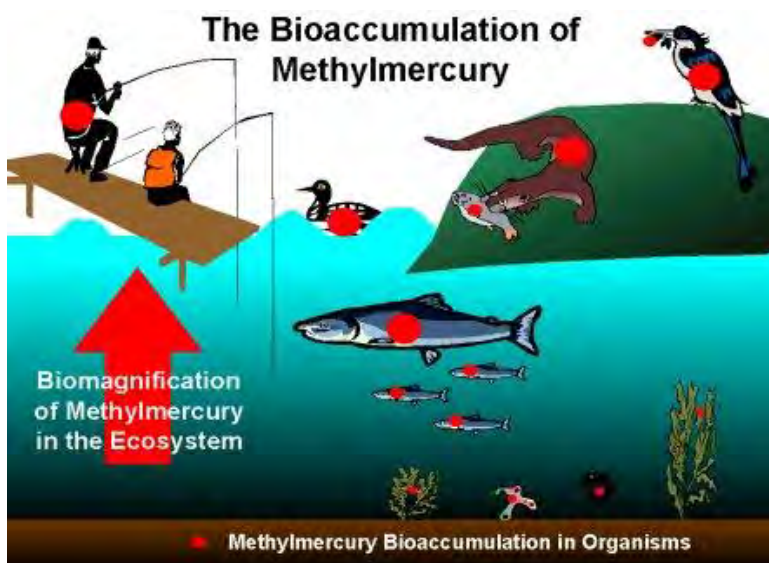


Photo Source: <https://www.canada.ca/en/environment-climate-change/services/pollutants/mercury-environment/health-concerns/food-chain.html>

Zinc in the Food Chain:

Source: <https://www.lenntech.com/periodic/elements/zn.htm>

Water is polluted with zinc, due to the presence of large quantities of zinc in the wastewater of industrial plants. This wastewater is not purified satisfactorily. One of the consequences is that rivers are depositing zinc-polluted sludge on their banks. Zinc may also increase the acidity of waters.

“Some fish can accumulate zinc in their bodies, when they live in zinc-contaminated waterways. When zinc enters the bodies of these fish it is able to **bio magnify up the food chain.**” As we

humans are many times the final customer on the food chain, zinc impacts our health by, “Very high levels of zinc can damage the pancreas and disturb the protein metabolism, and cause arteriosclerosis. Extensive exposure to zinc *chloride* can cause respiratory disorders...Zinc can be a danger to unborn and newborn children. When their mothers have absorbed large concentrations of zinc the children may be exposed to it through blood or milk of their mothers.”
Source: <https://www.lenntech.com/periodic/elements/zn.htm>

“Industrial sources or toxic waste sites may cause the zinc amounts in *drinking water* to reach levels that can cause health problems.” **Source:** <https://www.lenntech.com/periodic/elements/zn.htm>

Other Sources:

- <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=71EF4032-1&offset=2&toc=show>
- https://www.ccme.ca/files/Resources/supporting_scientific_documents/Zinc%20CWQG%20SCD.pdf
- <https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/alaska/sw/cpa/Documents/L2010CadmiumLR122010.pdf>
- <https://novascotia.ca/fish/commercial-fisheries/industry-overview/>
- <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/comm/atl-arc/lobster-homard-en.html>
- http://www.assembly.pe.ca/sittings/2018spring/transcripts/17_2018-19-10-transcript.pdf
- <http://employmentjourney.com/industries/fisheries/>
- [http://cwn-rce.ca/wp-content/uploads/projects/other-files/Canadas-Challenges-and-Opportunities-to-Address-Contaminants-in-WW-Supporting-Doc-2.pdf](http://cwn-rce.ca/wp-content/uploads/projects/other-files/Canadas-Challenges-and-Opportunities-to-Address-Contaminants-in-Wastewater/CWN-Report-on-Contaminants-in-WW-Supporting-Doc-2.pdf)
- <http://cwn-rce.ca/report/canadas-challenges-and-opportunities-to-address-contaminants-in-wastewater/>
- <https://nsadvocate.org/2019/01/24/matt-dort-on-northern-pulp-effluents-and-the-northumberland-strait-its-about-more-than-meeting-flawed-regulations/>

Northern Pulp on under the Human Health Evaluation starting on page 489 states, “Public and regulatory concerns regarding the potential human health effects of project emissions and treated effluent discharges have been raised throughout the project development period, and it is likely that such health-related concerns will continue to be raised during NSE’s EA review process.

The project has two main sources of emissions/discharges that may result in potential human exposure to project-associated chemicals:

- ***The marine treated effluent diffuser; and,***
- ***Air emissions from the replacement ETF and existing NPNS mill due to future planned co-combustion of sludge with hog fuel in the mill power boiler.***

*At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentrations) **will not be known with certainty until the project is operational.***”

“Will not be known with certainty until the project is operational?” This is totally unacceptable. We the citizens in direct path of air emissions made up on sludge with hog fuel

are to wait until the gases come across the harbour at us and we are diagnosed with cancer that we will find out at that time the new process burning sludge is not good for us?

The government is putting itself in a precarious position to even think of allowing industry to act this out in 2020.

One more point:

On page 34 in the Executive Summary submitted by DILLON CONSULTING in Table E.1.1-1: Summary of the Significance of Project-Related Residual Environmental Effects, the abbreviation of NS = No Significant Residual Environmental Effect Predicted is assigned for each Valued Environmental Component (VEC) with sub headers of Project Phase Accidents (Malfunctions, and Unplanned Events), Project Overall, Construction, Operation and Maintenance.

How can a project of this magnitude to be completed and up and running by January 31, 2020 not have at least a minimal of two of the following risks?

S = Significant Residual Environmental Effect Predicted.

L = Residual Environmental Effect is Likely to Occur.

U = Residual Environmental Effect is Unlikely to Occur.

P = Positive Residual Environmental Effect Predicted.

And where in this report is a contingency plan? This proposal is best case scenario with worst case results for those of us in its path.

There is just no way can this project be trusted by any of us who will be directly impacted by this project. There is just no trust with this company.

My Recommendation

I urge the Hon. Margaret Miller to reject the Northern Pulp Replacement Effluent Treatment Facility Project. Everything I wrote on the last 10 pages state why this project must be cancelled for the sake of drinking water, health of residents, health of our food supply, economic health and for all of us Northern Nova Scotia, Prince Edward Island and New Brunswick. The risks as I outline are significant adverse effects that cannot be mitigated.

This proposal in its presented format will forever impact the drinking water for the Town of Pictou and Municipality of Pictou County residents in this area. This proposal will forever impact the fishing industry in this region and beyond. This proposal and the results will come with more health issues, respiratory illnesses and cancer rates in addition to a spoiled reputation of Canada's Ocean Playground. This proposal will impact our province, the province of Prince Edward Island and New Brunswick. It took only one mad cow to stop an industry in its tracks.

This is not an ~~if~~ statement. This is a ~~when~~ statement. History will repeat itself.

There is a Plan B for Nova Scotia, including the forestry industry. Today there has never been such a demand for wood and its products. There is a very bright future ahead for the forestry

industry that is different from ripping under age trees from the ground and mincing them into pulp for paper and toilet paper. We just change our natural resource, grow hemp for those products and follow the Leahy Report.

We need to address climate change and work toward meeting those targets. We must reduce our environmental impact with more sustainable industries and a 2020+ vision.

As a taxpayer of this province, I will be paying for the decisions that will be made over the next month for many years. I want to pay taxes on a Plan B that gives us a healthier province and a bottom line positive impact to our economy, forestry, fishing, tourism, business communities, and for all residents in this community and beyond. We just need to get to work on Plan B.

Thank you

Email: [@eastlink.ca](mailto:)

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 5:33:47 PM

Project: replacement_effluent_treatment_facility_project Comments: The future of our air and water are of the utmost importance. It is far more important than profits for an already wealthy foreign conglomerate. The wealthy family who owns a litany of companies, including Paper Excellence parent company of Northern Pulp has been convicted of illegal logging in China, Cambodia, and Indonesia. Why should we trust them? I can guarantee they dont care at all for the future of Nova Scotias forests or people. I have no faith or trust in Northern Pulp after decades of lying and spewing their noxious chemicals into my hometowns air. I do not support the pipeline into the Northumberland Strait. I am strongly opposed to high temperature waters which I believe will also be polluted with chemicals entering the strait. I am certain that the impact on the ecology of the area near the outfall, and further removed, will be significant. Rising temperatures in ocean waters are already a serious concern with climate change. The last thing we need to do is further contribute to the temperature rise. I understand there is concern for jobs, especially in rural Nova Scotia. However, NS Governments most recent tweet March 9, 2019 states that the unemployment rate is at its lowest since modern surveys began in 1976. It is also time for our rural economies and forestry industry to diversify. With some effort and innovation, I think there are great potential opportunities in both industries. Whatever happens, it is extremely important that the province keeps their promise and closes Boat Harbour by January 2020. Name: Email: @gmail.com

Privacy-Statement: agree x: 62 y: 21

From:
To: [Environment Assessment Web Account; minister.environment@novascotia.ca](mailto:minister.environment@novascotia.ca)
Subject: Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 9, 2019 5:35:26 PM

ea@novascotia.ca

minister.environment@novascotia.ca

Dear Minister Miller,

I respectfully request that you reject Northern Pulp's effluent treatment replacement proposal on the grounds that it will have a greatly negative impact on an already fragile ecosystem- the Northumberland Strait.

I grew up in Pictou and still clearly remember when the mill began operation. I was 11 years old, gagging at the rotten egg stench as I walked to school with my friends. We all wondered when we could breathe fresh air again. I remember being told that I would soon get used to the smell, that it meant jobs for Pictou County, that it was stinky but safe. I remember when we were no longer able to take the little ferry to Pictou Landing to swim off the pier with the indigenous children, or at any of our usual beaches, because the water had become "contaminated". My family would only swim or fish in waters outside of Pictou Harbour after that.

After high school I moved to Halifax for study, became a Registered Nurse and worked in health care . As I worked and learned about the determinants of health I came to realize the risks posed by environmental pollution. Safe water, clean air and healthy workplaces are vital for healthy communities. It became obvious then that the health of the populations of Pictou, Pictou Landing First Nation and much of Pictou County were being sacrificed for some jobs at a massively polluting pulp mill.

Many in my large extended family reside throughout the Pictou County and I still spend considerable time there. I shop, eat out and attend entertainment events in Pictou. The Capital of Pictou County, it is a town steeped in a rich cultural heritage as the birthplace of New Scotland. Each summer folks from throughout the county, the province and beyond gather to celebrate the labours of local fishermen at the Pictou Lobster Carnival. The deCoste Performing Arts Centre hosts cultural and musical events throughout the year and is a tourism hub for visitors arriving by car and by boat at the nearby marina. I sometimes sail in the deep waters of Pictou Harbour out to Pictou Island. I camp at the local provincial park, Caribou-Monroe's Island, and take leisurely walks around that unspoilt natural preserve. I visit and stay near the Caribou Island Lighthouse, and walk on the mudflats at low tide. I swim and kayak along that shore and share the unique tranquility with shorebirds and seals. I wish more people could have the opportunity to share and respect the beauty and peacefulness of the Northumberland Strait.

I believe the tourism industry in Pictou County has great potential, but the smelly polluting eyesore directly across the harbour from downtown Pictou is definitely a detractor. Visitors are often put off by the site and/or smell and choose to spend time and have their meals elsewhere. The locals hope for change.

I am keenly aware that Northern Pulp provides employment opportunities to this community, but at what cost now and in the future? I understand the necessity of jobs to the survival of a community. Two of my brothers worked at the mill; the elder as an engineer in the and the younger as a tradesman in the . The elder, now in his late , worked there when the mill was newish and well maintained. The younger worked there through new management, shortcuts in maintenance, and an ever increasing demand to produce more regardless of the capacity the mill was designed to manage.

My father, brother, and other relatives were/ still do make a living from fishing lobster and other seafood off the coast of Pictou County. These jobs provide food and income, and are also part of the culture and heritage of Nova Scotia.

Based on Northern Pulp's well documented track record I do not believe they are good corporate citizens. The preservation of this area is not their priority, but rather their own profit for investors abroad. I am very concerned about the current plan for the effluent pipe. I share in the fear that Pictou's watershed area will be placed at risk from pipe leakages and that the coastal waters around Pictou County will become devoid of marine life, unsafe for human recreation, and a vital fishing industry will be lost.

I stand with the First Nations peoples of Pictou Landing in opposing this plan and agree that many years of environmental racism must end.

I encourage you to stand for the preservation of a healthy environment in and around Pictou County, for the people and for the aquatic life.

Sincerely,

Sent from my iPad

From:
To: [Environment Assessment Web Account](#)
Subject: , My Addition to my Northern Pulp's Proposed Effluent Treatment Facility submission on March 6th
Date: March 9, 2019 5:39:56 PM
Attachments: [outfall comparison, depths, ice, scallop buffer Zone.pdf](#)

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442

Email: EA@novascotia.ca

Dear Ms. Miller:

Re: Northern Pulp Nova Scotia - Environmental Assessment Registration Document-
Replacement Effluent Treatment Facility

In Addition to my Submission on March 6th, I would like to add this comparison of the Northern Pulp Mill that is proposing to build an AST system to a mill in British Columbia that is using an AST system and show the major difference in their receiving waters. I have also added in the attached document the scallop buffer zone that the fishermen must abide by within their conditions for scallop fishing. This shows the difference in how Northern Pulp shows the buffer zone in their EA versus how DFO has set it in according to the Fisheries Act. Also in the document is a image of the present day ice report showing the gulfs ice conditions and how the ice affects the strait.

After looking through my document, I hope you understand why there are many issues of great concern to me in Northern Pulps EA submission. These issues need more review and information to insure the heath and safety for both the people of Nova Scotia and the Northumberland Strait to which we fish and share with surrounding Provinces. I am asking that you, as Minister for Nova Scotia Environment, order an Environmental Assessment Report of Northern Pulp's proposed effluent treatment facility.

Thank You

Lobster Fisher,

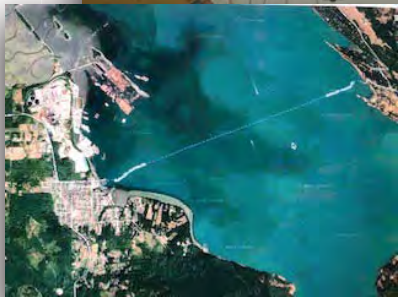
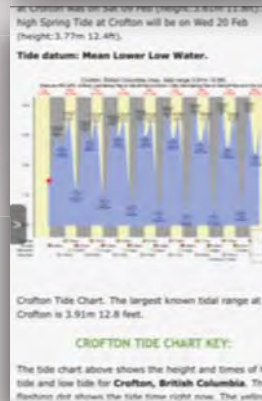
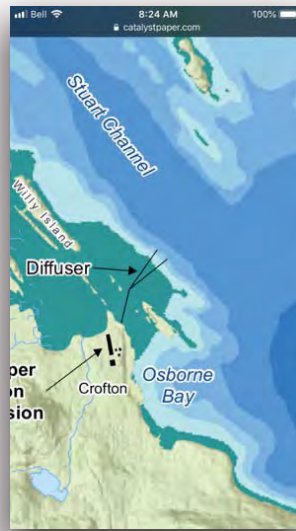
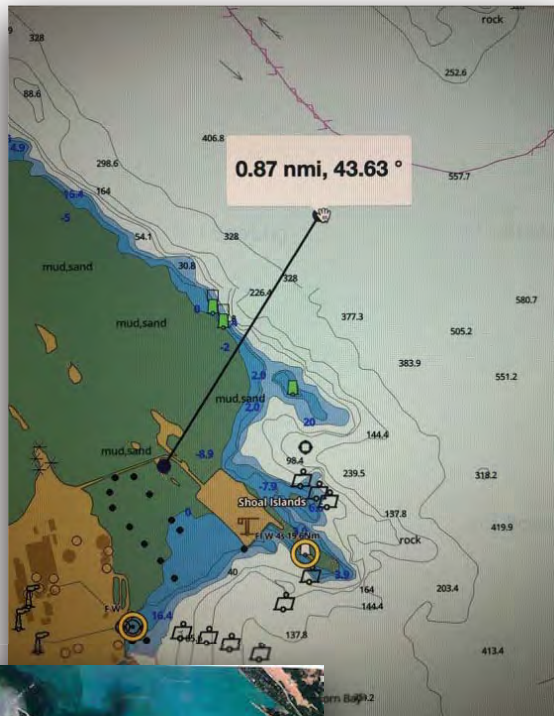
g@hotmail.com

Outfall Comparison of Crofton, BC Mill & Northern Pulp
Depths of Proposed NP Outfall Location
Ice Chart of Northumberland Strait
Outfall and pipeline fall within Scallop Buffer Zone
Threats to Gulf of St. Lawrence

March 9, 2019

Catalyst Paper Outfall Crofton, British Columbia

Northern Pulp Proposed Outfall



Water depth: 400-500 feet
Distance from Shore: 1.96 nautical miles
Tidal Range: 12.8 feet (Feb 12/19)

sources: gpnauticalcharts.com; tideforecast.com; <https://sites.google.com/dillon.ca/northernpulpetf/frequently-asked-questions>



Water depth: 67 feet
Distance from Shore: 1.84 nautical miles
Tidal Range: 6.7 feet (Feb 12/19)

Water depths surrounding proposed pipe location & outfall

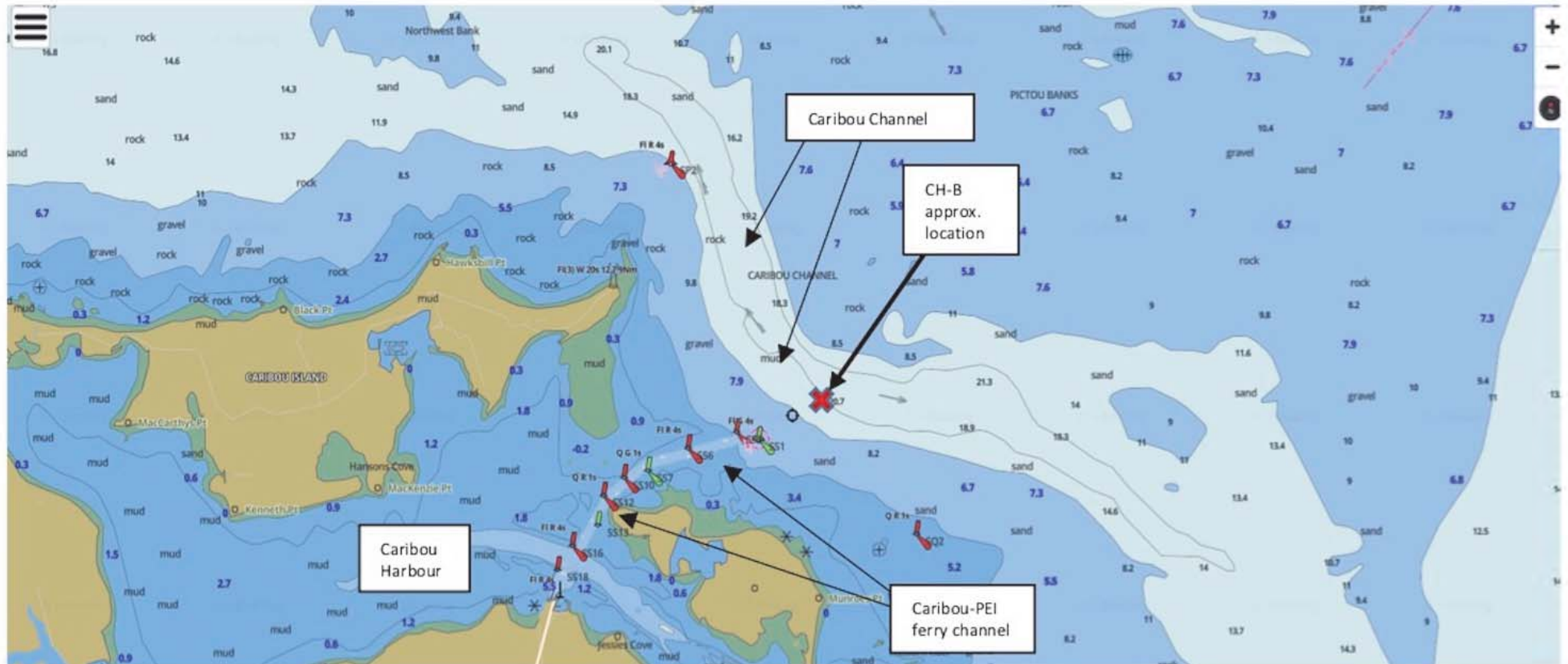
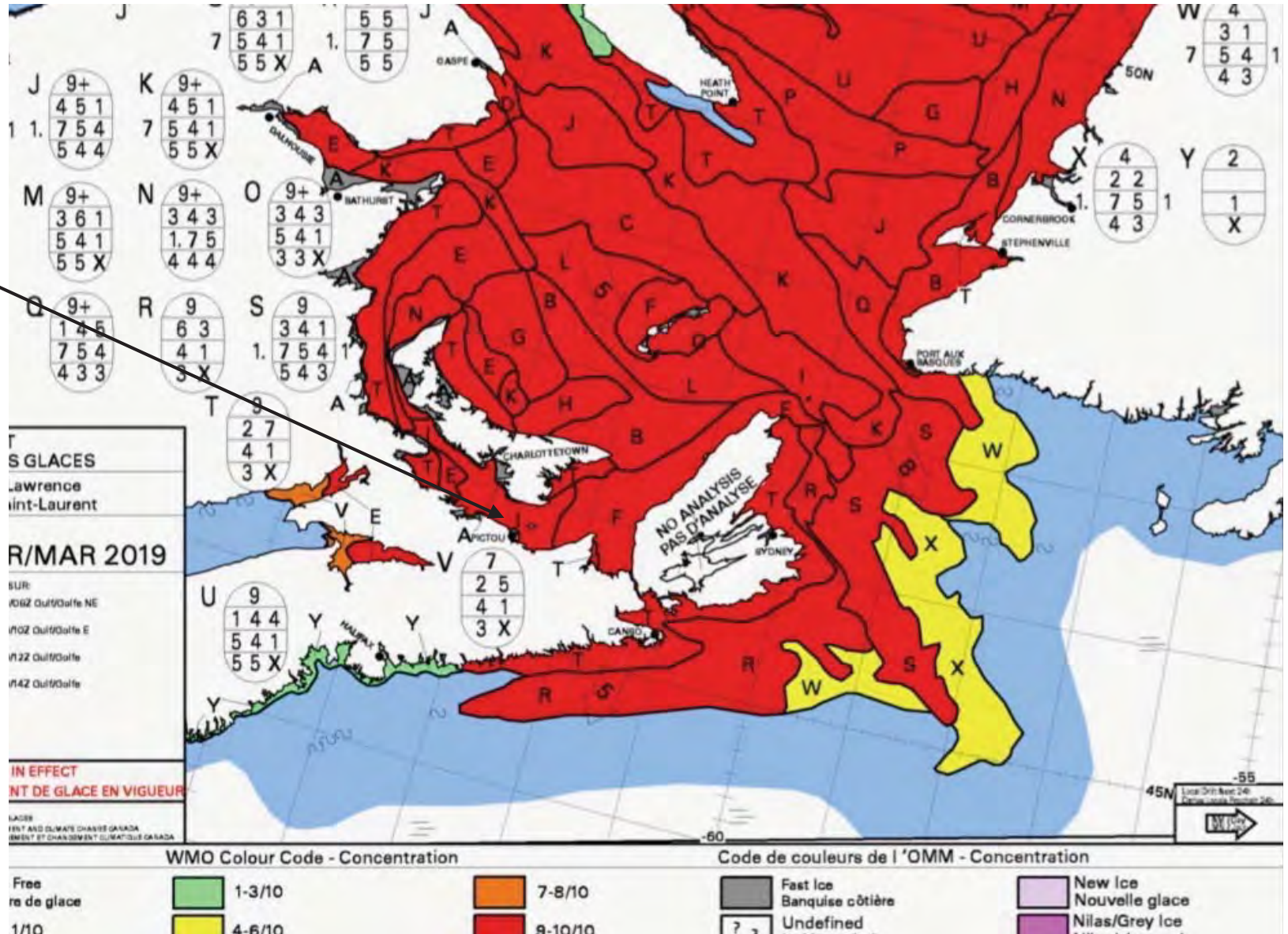


Chart of Caribou Channel and surrounding area

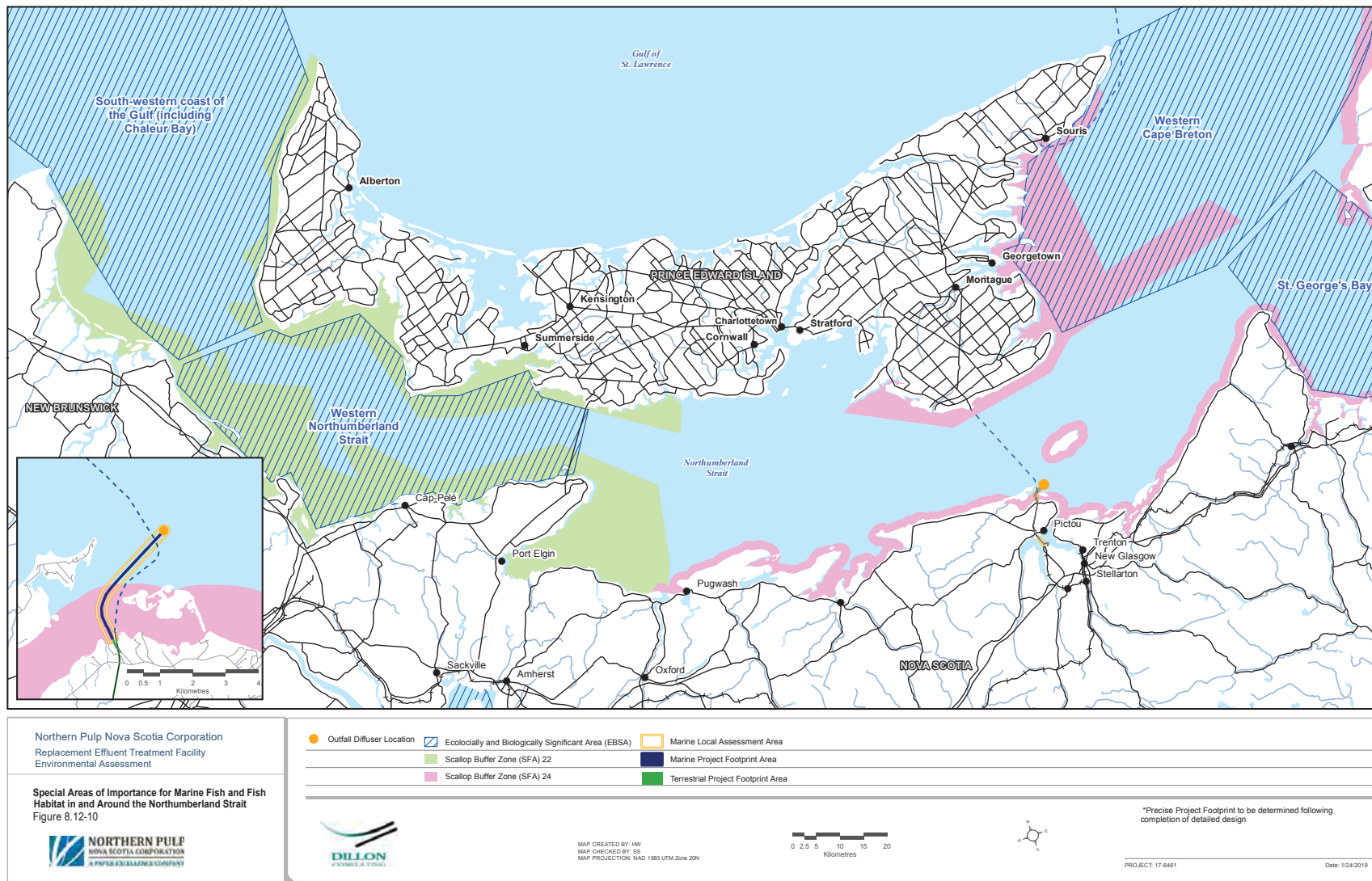
Northern Pulp's proposed outfall at point CH-B in the Caribou Channel is to be placed in a relatively small area with a depth of 20 metres. As this chart illustrates, the area becomes significantly shallower within a short distance. Depths are more typically between <1 to < 8 metres in most of the surrounding Caribou Harbour and Pictou Banks area.

Ice Chart of Gulf of St Lawrence and Northumberland Strait: 03/09/19

Approximate Effluent Pipe Location & Outfall



Scallop Buffer Zones as depicted in Northern Pulp's EA



8.12.2.7 special areas 382

Scallop Buffer Zones SFA 22 and 24 are part of a system of Scallop Buffer Zones in SFA 21, 22, and 24 that covers a total area of 5,835 km² (DFO 2017). **Scallop Buffer Zones were established to protect juvenile American lobster as they are known to contain lobster nursery habitat** (DFO 2017). Scallop Buffer Zone SFA 22 is in the western Northumberland Strait, approximately 85 km to the west of the marine PFA. Scallop Buffer Zone SFA 24 is in the eastern Northumberland Strait and the effluent pipeline will cross through the Scallop Buffer Zone SFA 24 close to shore (**Figure 8.12-10**) in Caribou Harbour near Jessies Cove. The location of the outfall is outside this buffer zone.

Outfall and pipeline fall within Scallop Buffer Zone which protects juvenile lobster habitat

In the text accompanying image 8.12.2.7, special areas 382, which includes this inset map, Northern Pulp states, "The location of the outfall is outside this [scallop] buffer zone."

The scallop buffer zone for this area is defined in Fishing Season Conditions 2018 Document DFO-0000471625. Scallop Condition 7 reads:

No person shall fish for scallops in that portion of scallop fishing area 24 in those waters adjacent to the Province of Nova Scotia within one [1] nautical mile from the nearest point of land in the counties of Cumberland, Colchester, Pictou, including Pictou Island in the Northumberland Strait, and Antigonish.

The map provided by Northern Pulp does not include the scallop buffer zone around Munroe's Island and Caribou Island (the white shorelines that are missing pink outlines.) This is clear on the inset map. The omission of the buffer zones in these areas makes it appear that the outfall location (orange dot) is farther from the buffer zone than it actually is.¹

Measuring one nautical mile (1.852 km) from every point of land in the area, as defined in Scallop Condition 7, **the proposed outfall location would fall within the buffer zone, not outside it as Northern Pulp states.** Although Northern Pulp has not provided precise lat-long co-ordinates for the outfall, its location on Northern Pulp's map and the description that it is situated in one of the few deep areas would place it within the scallop buffer zone.

Northern Pulp also states "the effluent pipeline will cross through the scallop buffer zone SFA 24 close to shore."

The distance from shore that the effluent pipeline would cross through the scallop buffer zone as represented on Northern Pulp's map is 1.85 kilometers (1 nautical mile.) Because the term "close to shore" is vague, it is important to note the actual distance is almost 2 kilometers.

However, an accurate representation of the scallop buffer zone would show that **the entire 4.1km pipeline would run through the scallop buffer zone.**

In the list of marine refuges, Fisheries and Oceans Canada describes the [conservation objective for Scallop Buffer Zones \(SFA 21, 22, 24\)](#) as "to protect juvenile lobster habitat."²

They further state:

"The following ecological components of interest are conserved through the prohibitions.

Species of regional importance: juvenile American lobster

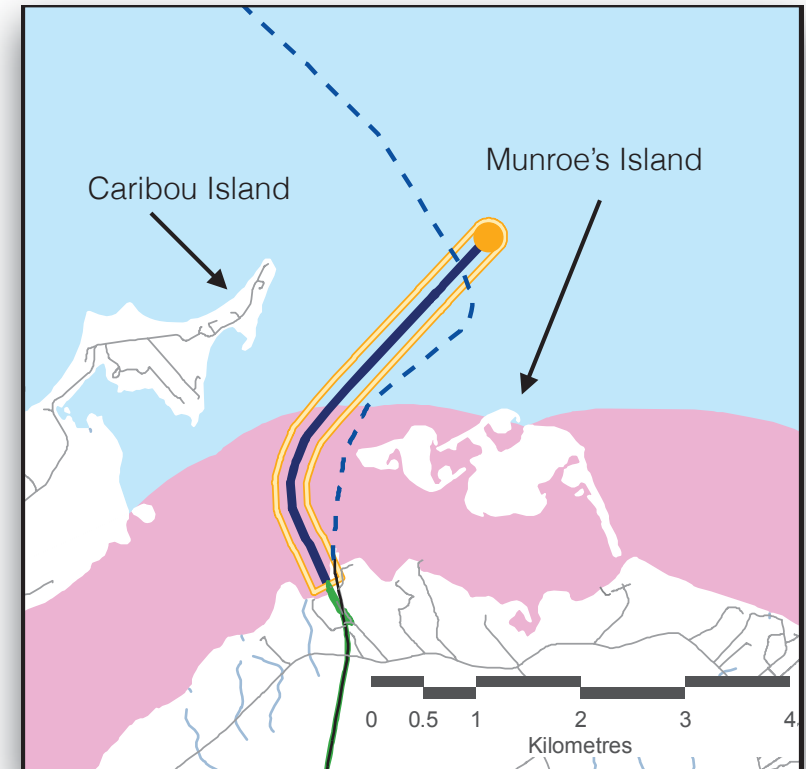
- **Why it is important:** American lobster is a commercially important species.

Habitat that is important to biodiversity conservation: American lobster nursery habitat

- **Why it is important:** American lobster nursery habitat is important for the life-cycle of the species.

In addition to prohibition on scallop dragging, the section on prohibitions also notes:

"No other human activities that take place in this area are incompatible with the conservation of the ecological components of interest."



The Environmental Context for the scallop buffer zone notes, "**These closures offer protection to other important species and habitats** in the southern Gulf of St. Lawrence. For example, SFA 22 contains the last remaining area in which the winter skate (a population under the endangered designation by [COSEWIC](#)) is found during the summer. It also includes a unique population of lady crab (suspected to be endemic to the region), and the rock crab (an important prey for several species and a commercial species)."

We note that fishers in the Caribou area are aware that the immediate area of the proposed outfall and surrounding areas contain a population of rock crab and juvenile rock crab.

¹ We have spoken to DFO. They confirm that the conditions of the license are the conditions enforced under the Fisheries Act. DFO recognizes that there are errors on the on-line map and they are in the process of making corrections.

² <http://www.dfo-mpo.gc.ca/oceans/oeabcm-amcepz/refuges/sfa-zpp-eng.html>

Northern Pulp proposed outfall with Scallop Buffer Zone



Measuring one nautical mile (1.852 km) from every point of land in the area, as defined in Scallop Condition 7, the proposed outfall location would fall within the buffer zone, not outside it as Northern Pulp states. Although Northern Pulp has not provided precise lat-long co-ordinates for the outfall, its location on Northern Pulp's map and the description that it is situated in one of the few deep areas would place it within the scallop buffer zone.



1.852 km = 1 nautical mile

DFO Scallop Buffer Zone Regulations/Coordinates

Fisheries and Oceans Canada / Pêches et Océans Canada

Document No: 090-99004 (1/11) Page 9 of 15

28	46° 47' 15"N	60° 53' 46"W
29	46° 49' 12"N	60° 51' 38"W
30	46° 53' 33"N	60° 44' 27"W
31	46° 55' 34"N	60° 42' 32"W
32	46° 58' 42"N	60° 40' 47"W
33	46° 58' 59"N	60° 40' 21"W
34	46° 58' 41.8"N	60° 39' 56.8"W

6. No person shall fish for scallop in that portion of scallop fishing area 24, in those waters adjacent to the Province of Prince Edward Island inside rhumb lines (similar to straight lines plotted on a nautical chart) joining the following points in the order they are listed:

Point	Latitude North	Longitude West
1.	46°22'17"N	62°06'55"W
2.	46°20'39"N	62°06'54"W
3.	46°19'03"N	62°15'18"W
4.	46°04'39"N	62°15'38"W
5.	46°07'06"N	61°55'09"W
6.	46°04'42"N	61°53'06"W
7.	45°59'28"N	62°25'31"W
8.	45°56'47"N	62°30'38"W
9.	45°56'20"N	62°50'36"W
10.	46°02'25"N	63°04'17"W
11.	46°03'00"N	63°02'25"W

7. No person shall fish for scallop in that portion of scallop fishing area 24, in those waters adjacent to the Province of Nova Scotia within one (1) nautical mile from the nearest point of land in the counties of Cumberland, Colchester, Pictou, including Pictou Island in the Northumberland Strait and Antigonish.

8. No person shall fish for scallop in that portion of scallop fishing area 24, in those waters adjacent to the western coast of Cape Breton, Nova Scotia, within one (1) nautical mile from the nearest point of land, from the Canso Causeway, northward including Henry Island and Port Hood Island, to the Mabou Harbour entrance range lights.

Note: Unless otherwise specified, when the geographic boundary of an area is expressed in Latitude and Longitude those point references are based the Geodesic System North American Datum 1983 (NAD83). Positions are expressed in degrees, minutes, seconds.

Canada

Fisheries and Oceans Canada / Pêches et Océans Canada

Document No: 090-99004 (1/11) Page 1 of 15

REGISTRATION(S) AND/OR FISHING LICENCE(S) - 2018

This document authorizes the registration card holder and/or licence holder to engage in fishing and related activities on the Atlantic coast of Canada subject to the provisions of the Fisheries Act, the Species at Risk Act and the Regulations made thereunder.

This licence and/or registration is issued under the authority of the Minister of Fisheries and Oceans Canada.

LICENCE HOLDER: [REDACTED]

FIN: [REDACTED]

ISSUANCE DATE: October 20, 2018

ISSUING REGION: GULF

Licence No. [REDACTED]

Species: SCALLOP, SEA

Homeport: CARIBOO/FERRY WHARF

Operator: [REDACTED]

Vessel: [REDACTED] NAME: [REDACTED] TON: [REDACTED]

2018 LICENCE CONDITIONS VALID FOR FISHING SCALLOP IN SCALLOP FISHING AREA 24

This licence confers on the licence holder/operator, subject to the Fisheries Act and Regulations made thereunder, the authority to fish under the conditions set out below:

- FISHING AREA
 - These licence conditions are valid for fishing Scallop in Scallop Fishing Area 24.
 - It is prohibited to fish in the portions of scallop fishing area 24 as described in Annex B -Definitions of the Scallop Buffer Zones.
- FISHING GEAR
 - These licence conditions authorize the use of the following gear: Drag(1)
 - While at sea during the daily closed times, all scallop gear must remain on board the vessel.
 - The maximum cumulative width of scallop drag buckets must not exceed 5.08 meters (outside measurement). The measurements must be taken on the outside of each bucket.
 - All rings used in the scallop drag must have unobstructed circular openings, the inside diameter of which shall not be less than 82.6 mm with the exception of the first row of rings attached to the bucket frame where the inside diameter of all rings shall not be less than 76.2 mm. The use of rings or solid blocking in the end of the drag bucket is authorized. When using chain sweeps, the mesh used must create an opening equal in size to the 82.6 mm rings.
 - WASHERS

Canada

Warmer Water Poses Threat to Gulf of St. Lawrence

TELEGRAPH JOURNAL

Warmer waters pose threat to province's seafood stocks

JACOB LORINC TIMES & TRANSCRIPT

Sept. 28, 2018

A University of Washington study shows the Gulf of St. Lawrence is losing oxygen faster than almost anywhere else in the world's oceans, threatening a range of species vital to the Maritime economy.

Published last week, the study found the decline to be directly connected to climate change, as increased carbon dioxide from urbanization and industry seeps into ocean currents and flows into freshwater regions.

Study leader Marion Claret said water from the Gulf Stream, which flows northwards along the eastern coast of North America, is filtering into the St. Lawrence Seaway as the Labrador Current – which flows southwards toward the Maritime region and typically blocks the entrance of gulf stream waters – weakens.

In turn, temperatures rise in deep-water areas of the Gulf of St. Lawrence, producing a decline in oxygen levels.

“The change is being amplified in this area because now what’s

happening is that the Gulf Stream is blocking the Labrador current from transporting oxygen-rich waters toward the Grand Banks,” Claret explains. “Warmer water then enters the Gulf which lowers the oxygen level.”

Katja Fennel, a professor of oceanography at Dalhousie University, says the lower oxygen levels are unsuitable for species such as Atlantic wolffish, Atlantic salmon, Atlantic cod, and snow crabs, who dwell in lower levels of the gulf.

“Some species are better at withstanding lower oxygen levels than others,” she says. “But if these oxygen levels continue, Atlantic cod, for example, will not be able to thrive because of oxygen levels.”

Some of these species are crucial to New Brunswick fisheries. According to Fisheries and Oceans Canada, snow crab is the second-most valuable commercial fishery in Atlantic Canada.

“The crabs are also the least resistant to low oxygen levels, though, which poses a problem for them in areas of the gulf,” says Fennel.

She notes that changing oxygen levels may lead snow crabs to migrate to other areas in the gulf, forcing commercial fishing zones to be redrawn.

“It could have an impact for fishing, yes, but it’s difficult to say where they would relocate and how that would be accommodated for fishing,” Fennel says.

Fennel says snow crab numbers dipped in 2012 as a result of warming temperatures, but notes that the changes in temperature won’t always be consistent.

“There’s a lot of variability in the ocean, so some years oxygen will be low and some years it will be high. But we do know that, on average, the levels are declining, which in time-scales of three to four decades will pose problems for the fish.”

Declining oxygen levels in the gulf have been monitored for years. Fisheries and Oceans Canada has tracked rising temperatures in the St. Lawrence area since 1920, and began following oxygen levels in 1960.

In 2005, the department reported that oxygen levels declined

dramatically, but could not specify the cause.

“What we show is that much of this change is related to climate change, and is associated with the carbon emissions that are released into the atmosphere,” says Claret.

“This is happening now,” says Fennel. “I can’t tell you whether it’s going to be in five or seven years when something really bad happens, but we’re talking about within our lifetime.”

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 9, 2019 5:45:06 PM
Attachments: [EA Letter.docx](#)

Good afternoon,

Attached is my letter requesting Minister Miller to reject Northern Pulp's Replacement Effluent Treatment Facility Project.

Thank you,

March 9th, 2019

The Hon. Margaret Miller
Minister of Environment

Minister Miller:

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project.

My name is _____ I grew up in the small community of Caribou River on the Sunrise Trail along the beautiful Northumberland Strait.

I am the daughter of a third-generation fisherman, and great granddaughter of _____, a former Pictou County councilor, Pictou Landing resident and land owner. My great grandfather's property near Boat Harbour was expropriated by the Nova Scotia government for use by Scott Paper Company in the 1960s.

I am currently residing in Amherst, and work seasonally for Tourism Nova Scotia as a travel counsellor at the Visitor Information Centre at the Nova Scotia/New Brunswick border.

I wrote an original thesis, titled, "Voices of the North Shore: The Lobster Fishery of Pictou County."

I am requesting that you reject this proposal by Northern Pulp based on the fact that there is simply not enough evidence to prove there will not be irreparable adverse and environmental effects. I also do not believe that this EA process has been fair. Northern Pulp did not hold public consultations on the Caribou Harbour effluent pipe outfall site plan, as they previously had with their initial Pictou Harbour effluent pipe outfall site plan. It is also unfair to expect the general public to be able to sift through and comprehend thousands of pages of documents and appendices that were included in Northern Pulp's Environmental Assessment Registration Document in a thirty-day period. In the event that you do not reject this proposal, I ask that you require an Environmental Assessment Report, or defer the proposal to the CEAA for federal review.

I work on the frontlines of the 2.7 billion-dollar tourism industry in Nova Scotia, and it is my job to help our visitors make informed decisions about where to visit in our beautiful province. Having grown up on the Sunrise Trail, I always suggest it as a scenic alternative to the TransCanada Highway, especially for those travelling towards Cape Breton Island. Visitors can experience the sweeping seaside farmland, lush forests, small fishing communities, and the well renowned sandy beaches and warm swimming waters of the Northumberland Strait along this secondary route. If Northern Pulp is permitted to place an effluent pipeline in Caribou Harbour, near one of the most popular provincial park campgrounds and beaches along the Northumberland Shore, any detrimental effects from the effluent would be felt immediately by tourism operators all along the Northumberland Strait. Visitors already comment on the 'stink'

that hangs over the Town of Pictou from Northern Pulp, and it would be difficult to confidently tell visitors that it is safe to swim in the waters of the Northumberland Strait with the lack of information that has been given about the makeup of the effluent. Northern Pulp's Environmental Assessment Document states, "At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentration) will not be known with certainty until the project is operational."¹ This is unacceptable. Allowing a pulp mill to potentially dump effluent in to a body of water without knowing the composition of said effluent is outrageous and wholly irresponsible, on the part of the mill as well as the provincial and federal governments. If Nova Scotia's tourism industry suffers as a result of this project, it will falter and generate less revenue for the province. As an industry that is striving for \$4 billion in revenue by 2024, tourism, and the province, cannot afford to support this project.

The pipeline also has the potential to cause mass devastation, not only to lobsters, but to other species within the environment as well. Pelagic species of fish and bivalves (such as mussels, scallops and oysters) would be contaminated or killed off by the effluent, or from the extreme temperature of the effluent, as noted in Table 5.2-1 found on page 46 of Northern Pulp's Environmental Assessment Registration Document.² The study, "Detecting p53 family proteins in haemocytic leukemia cells of *Mytilus edulis* from Pictou Harbour, Nova Scotia, Canada," by S. St-Jean et al. from 2005, provides a detailed study on the impact of the environment on blue mussels in fourteen various sampling sites chosen in the Pictou Harbour and harbour mouth. The researchers found that each set of healthy mussels placed in all fourteen sites developed leukemia cells and contained various other carcinogens.³

I would also like to note that in Appendix O-R, "A Summary of the Scientific Literature Related to the Effect of Bleached Kraft Mill Effluent on the American Lobster (*Homarus americanus*)," prepared for Dillon Consulting Ltd. by _____ of Mount Allison University, focuses on lobster exposure studies completed in the 1960s. Clark notes, "However, due to the range of individual lobster susceptibility, and the considerable change in chemical composition of today's treated BKME, it is recommended that lethality testing, along with additional exposure tests, be completed with today's treated BKME to determine the impact that treated BKME will have on American lobsters."⁴ I would also like to draw attention to the fact that _____ had included documents by _____ in his references. However, he omitted one document by _____, titled, "Bleached kraft mill effluent near Pictou, N.S. and its effect on the marine flora

¹ Dillon Consulting Ltd., *Environmental Assessment Registration Document: Replacement Effluent Treatment Facility*. Submitted January 31, 2019.

² Dillon Consulting Ltd., *Environmental Assessment Registration Document ...*, 2019.

³ St-Jean, S., Stephens, R., Courtenay, S. and C. Reinisch, *Detecting p53 family proteins in haemocytic leukemia cells of *Mytilus edulis* from Pictou Harbour, Nova Scotia, Canada*. Canadian Journal of Fisheries and Aquatic Sciences, 62, (2005): 2055- 2066.

⁴ Dillon Consulting Ltd., *Registration Document Appendix O-R*. Submitted January 31, 2019.

and fauna with a note on the Pictou Co. lobster landings.”⁵ I would suggest this document be reviewed as well by the Department of Environment.

I do encourage you to consider what was shared in all the letters sent for review by the public during this thirty day input period. Many have worked very hard to convey their concerns and expect their government to take everything shared in to consideration. We must all take responsibility for the legacy we are leaving behind. I believe that there would be devastating adverse effects if an effluent pipe is allowed to enter the Northumberland Strait. One tainted lobster is all it takes to destroy the seafood industry of the Atlantic provinces. We must also put an end to the environmental racism that has plagued Pictou Landing First Nation for over five decades. It is unfair to ask them for an extension to the use of Boat Harbour. We must stand with PLFN now as they work towards remediating Boat Harbour.

“Beyond its economic functions, a healthy marine ecosystem is an integral support for local culture and identity and for the quality of life in adjacent communities.”⁶ Pictou County is much more than the Northern Pulp mill.

Regards,

⁵ Scarratt, D. J., *Bleached kraft mill effluent near Pictou, N.S. and its effect on the marine flora and fauna with a note on the Pictou Co. lobster landings*. Ottawa: Fisheries Research Board of Canada, 1969.

⁶ Department of Fisheries and Oceans, *Working Group Report: Northumberland Strait Ecosystem Initiative, Habitat and Resource Protection*. Ottawa: Department of Fisheries and Oceans, 2007, 10.

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 6:00:52 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by: _____
@hotmail.com)

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 6:04:44 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

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The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

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We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by: _____
@hotmailcom)

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp's Replacement Effluent Treatment Facility Project
Date: March 9, 2019 6:35:34 PM
Attachments: [Letter to the NS Environment Minister.pdf](#)

To Whom it May Concern,

My name is _____ and I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project. I live in Londonderry

_____. I have salt water in my blood. I am a descendant of New England planters, Acadians and Mi'kmaq; of coal miners, fishermen and lumberjacks. My ancestors have lived in Amherst, Springhill, Parrsboro, Cape Breton, Antigonish, Scot's Bay, Pugwash, and Prince Edward Island. For hundreds of years my relations have relied on the natural resources of this province for their livelihoods. If they were here today, they would be ashamed with what is being proposed by Northern Pulp.

My grandmother grew up in Amherst and spent her entire life in and out of the waters of the Northumberland Straight. My father and aunt spent their childhood summers on the beaches.

_____ my grandfather bought a small cottage in Linden, directly on the shore, and my siblings and I spent every summer of our childhoods on the beach. And now my son does. And my unborn baby will. _____ . We are the experts of our little strip of shoreline.

Every year we see where the winter surf has pounded boulders into new positions. We watch erosion take its toll on the clay hills. We know the tides. We know when there will be an abundance of seaweed, when the water will be murky, or when the water will be calm and clear. We know when the jellyfish come and for how long they will stay. We watch eagles, seagulls, cormorants, sandpipers and gannets. We see pilot whales, dolphins, small sharks, and schools of fish. We watch the salt ships come and go from Pugwash and fishing boats checking their traps. We have seen the decline of crabs. We pick up litter. We soak up salt. We are the experts. Our hearts are in the Straight and the salt is in our blood. If effluent is pumped into the Straight, what will happen to our little piece of shoreline?

In table 4.2-4 on page 31, Northern Pulp states that a key consideration in locating their Marine Outfall Location is to "develop a solution that does not affect Boat Harbour in the future tidal state..." In this scenario, Northern Pulp is not taking responsibility for anything outside of the Marine Outfall Location. Based on common sense and knowledge of tidal waters, we all know that the effluent cannot be contained within this location. Due to the nature of marine environments being constantly in flux, it is safe to say that the effluent will reach all areas of the straight and beyond. The exact impacts on marine life and coastal areas are impossible to predict because they cannot be studied until they are happening, in which case it will be too late. But again, common sense tells us that any foreign substance that is chemically treated will have adverse effects on the environment. This is an irresponsible, "deal with it later" approach on behalf of Northern Pulp.

My family and I work in forestry across the country. I've been a tree planter, a silviculture manager, and a harvest block planner for various companies. In Nova Scotia, I have worked for Northern Pulp and Irving. I've kept my ear to the ground, listened to, and learned from the professionals. I understand this industry and I understand what closing the mill would do to our local economy. I know that a closure will affect both mill employees and contractors, my

family included. There will be an economic impact that ripples throughout the province for some time. But economies rise and fall all the time. Money comes and goes. Alternatively, we have one planet, one ecosystem. Ask yourself what is more important. Pumping effluent into the straight is absolutely backwards, idiotic and irreversible. I ask you to please do whatever is in your power as a representative and advocate for Nova Scotia's environment to do just that: represent and advocate for our environment. We cannot allow an effluent pipe into the Northumberland Strait.

In terms of the Project Justification and Alternatives (section 4.0), all I have to say is it is shameful enough that the Lahey review suggests the continued application of glyphosate on harvest blocks in Nova Scotia. Now Northern Pulp wants to dump wastewater into the Strait. These are not ecologically-focused decisions. When will the Nova Scotia government wake up and take a step forwards? I have no interest in supporting an industry that is destructive to the environment and to be honest, neither does anyone else in the forest industry that I have talked to. Northern Pulp held a meeting for its contractors, "asking them" to support their pipeline project. In fact, what they did was akin to fear-mongering. They threatened the contractors' livelihoods with the prospect of the mill closing. "Support us or you will lose your job." Please believe me when I say, this ultimatum has left us feeling helpless, guilty, and ashamed. I am personally not afraid to voluntarily abandon my post in forestry and I will not stand idly by if this effluent pipeline is approved.

I thank you sincerely for taking the time to read my letter and consider the points I have made. I am not an expert in environmental science but common sense and passion mixed with pride for our Strait compel me to take a stance, no matter how small of an impact it may have. I ask that you either a) reject Northern Pulp's proposal, or b) step aside because of conflict of interest and hand over the environmental assessment to the Canadian Environmental Assessment Agency.

Thank you,

The following is a list of friends and family who would like to show support for my letter, but who have not had the time to write their own due to the very short time period that was given to the public to respond

10 names have been redacted as per Section 20(1) of the FOIPOP Act.

Sent from [Mail](#) for Windows 10

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp 2
Date: March 9, 2019 6:49:57 PM

2019 March 09

To the Honorable Margaret Miller
Minister of Environment
Province of Nova Scotia
Halifax, NS

Via email to: 'ea@novascotia.ca'

Re: Project to Replace Boat Harbour Effluent Treatment Facility

Dear Minister Miller,

I will admit to having read Joan Baxter's book, "The Mill" however I think it is quite fair to say that trickery and overly-generous enticements were used by a previous Nova Scotia Government back in the 1960's to bring this mill to Abercrombie Point and that bullying and expensive Government handouts were used to keep it in operation over the past 50+ years.

I support the fact that we need jobs but not at such a heavy cost.

Based on past behaviours exhibited by the owners of this mill as well as previous Provincial governments I am concerned this project will continue to expose the Northumberland Strait fishery to the risk of industrial chemical pollution. It will also expose the 11 Km's of the overland pipeline route to the ferry terminal to the same risk.

The environmental damage done to Boat Harbour in the past is a disgrace and an embarrassment that must not be repeated.

For most of the past forty years my family and I have spent a lot of time visiting our extended family in Pictou County. We camp at Caribou - Munroe's Provincial Park, swim at local beaches from Melmerby Beach all the way to Cape John. We canoe and join family on boating trips from downtown Pictou to Pictou Island, stopping to fish mackerel and enjoy a dip in the Strait along the way.

The Northern Pulp mill was originally designed for a thirty year expected life according to Ms. Baxter's research. We are now at year 52, well past its "Best Before Date."

This means the mill will require significant investment from its owners if they are to adequately maintain it against wear & tear and mechanical break down as it ages further. But then again, why should they worry about upkeep if we have provided them with an Indemnity Agreement that transfers that burden onto the backs of Nova Scotia taxpayers?

We do not need nor can we afford another Sydney Tar Pond type of environmental disaster although Boat Harbour is clear proof that such a disaster already exists.

I reviewed the Dillon Report on this effluent pipe project and could see no mention of what the current useful life expectancy for this mill is.

I saw on page 42 of the online Report that, “the continued operation of the NPNS will ‘meet global market demands and supports the local and provincial forestry sector’ ...”

I would argue it is the other way around. I would say that our Nova Scotia forestry sector and the Nova Scotia tax payer are supporting the Northern Pulp mill. I flew over the eastern mainland in the fall of 2017 and was shocked to see the many square miles of grey wasteland between Abercrombie Point and the Eastern tip of Guysborough County. That will take a long time to replenish.

Then there is the health risk of the aerial spraying of glyphosate to kill off the deciduous trees in order to allow only coniferous trees to grow back for the benefit of this mill.

I believe the past negotiations and agreements between the Province of Nova Scotia and the various owners of the Northern Pulp mill were not made with the best interests of all of the people of Nova Scotia in mind and therefore should be considered to be null and void ab initio.

Sincerely,

—
x payer since 1975.

Sent from my iPhone

From: [Environment](#)
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 7:06:24 PM

Project: replacement_effluent_treatment_facility_project Comments: If the environmental assessment for Northern Pulp is anything like the one done for OSCO Aggregates, then its not worth the paper it is written on. Name: Email: Address: Municipality: Postal-Code: Phone: ### ### - ##### Fax: ### ### - ##### email_message: Privacy-Statement: agree x: 58 y: 19

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 7:36:05 PM

Project: replacement_effluent_treatment_facility_project Comments: After living in Pictou County for my whole life and loving places like Powels Point in Little Harbour and Melmerby Beach, Ive been horrified by what I saw at Boat Harbour. We know not to eat the clams or mussels at Powels Point, they make you sick. We used to have class trips to Boat Harbour. I got in trouble as kids we all knew that what was happening at Boat Harbour was wrong, I even got in trouble by my teacher for trying to talk about how I felt during the tour. If you see Boat Harbour you will never approve effluent to be pumped into the Strait. Please, for the sakes of my children and for all who love this province we call home, please no pipe. Systems fail to often to jeopardize the water that surrounds us. There has to be another way. Name:

Email: @hotmail.com Address: Municipality:

: Privacy-Statement: agree

x: 59 y: 25

From:
To: [Environment Assessment Web Account; minister.enviroment@novascotia.ca](mailto:minister.enviroment@novascotia.ca)
Subject: Please Reject NP's Replacement Effluent Treatment Facility Proposal
Date: March 9, 2019 7:40:28 PM

Dear Minister Miller;

I am writing to express my deep concern about Northern Pulp's proposal for a effluent pipe to pump waste water into Caribou Harbour and the Northumberland Strait.

I am a resident of Halifax but I grew up in the town of Pictou and I have a summer cottage in Caribou River. I am a social worker by profession and I hold a Master of Arts in International Development Studies and a Master of Social Work.

The pulp mill has had a devastating effect on the ecosystem of Pictou Harbour. As a young child I was able to swim in the Harbour but that changed after the mill was built due to contamination. Today, one can easily find deformed sea organisms along the beaches in the mouth of the Harbour and notice an ugly brown sludge on the water's edge or floating on top of the water in the middle of the Harbour.

With the upcoming and very much overdue closure of Boat Harbour, Northern Pulp has been unable to put forward a plan for effluent treatment and discharge that is convincing in terms of environmental protection. Caribou Harbour remains a diverse and rich ecosystem as does the surrounding waters of the Northumberland Strait. In summer we are able to swim, boat, fish, dig for clams and pick muscles in these waters and beaches. Our fishermen, their families and local businesses rely on this rich ecosystem for their livelihood and prosperity. The proposed effluent pipe threatens our entire way of life and must be stopped.

Traditional First Nations communities are said to plan their actions based on their effects seven generations into the future. I urge you to do respect this principle and reject Norther Pulp's proposal.

Sincerely,

From: [Environment](#)
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 7:44:34 PM

Project: replacement_effluent_treatment_facility_project Comments: It is my hope the Department of Environment will reject the plans for the Effluent treatment pipe which will dump millions of liters of toxic effluent into The Northumberland Strait. Dillion Contracting itself notes the need for more information on the effects of solids on Lobster Larvae. Joan Baxter in her review of the EA form Mar 5th entitled Northern Pulp Environment Document :Missing Mercury ...and oddles of Contradictions needs the governments attention. Senators call the Northern Pulp Plan An Environmental Disaster Fishers have been asking in every way possible for a Federal Environmental Assessment. Safe, sustainable renewable is what Nova Scotians will demand from whichever government which will take them into the future. Please reject. Name: Email: Address: Municipality: Postal-Code: Phone: ### ## - ##### Fax: ### ## - ##### email_message: Privacy-Statement: agree x: 49 y: 22

From: @sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: MY EA Submission on the Replacement Effluent Treatment Facility Project by Northern Pulp
Date: March 9, 2019 7:51:09 PM

Good Day. This serves as my submission for the environmental assessment of the subject project, in Pictou County, Nova Scotia.

I was born and raised in Pictou County, Nova Scotia. I am very proud of that fact, and of my family, and friends who have also become family over the years, that either reside in Pictou County, or elsewhere in Nova Scotia. I have a great deal of respect for the hardworking people of Pictou County, who have had to withstand the water and air pollution caused by the paper mill, now for well over 50 years. That fact makes it very difficult for me when I think of its ongoing effect on the health and well-being of all those who live both in that area, and nearby, and also its effect on the whole community, both environmentally and economically.

Others are qualified to speak as to the scientific evidence of its environmental harm to the ecosystems, to its negative impact on our resource, business, and tourist industries that rely on environmental well-being, and to its impact on the medical health of our people, adults and children alike, over the years.

I can speak only from my own experience, as a person who after decades of working elsewhere, decided upon retirement, to come back to Pictou County to buy a cottage, and spend several months of each year there, with my family members and life-long friends. It is also special time to have our grandchildren come to spend time with us at the beach, for them to explore animal life along the water's edge, and find new playmates there as well. The creation of all these memories together, with family and friends, very close to the actual land where I was raised, is what matters most, at this time of my life.

But then there is the pulp mill, which continues to create the air and water pollution caused by its processes, and its impact on human health, on adults and children alike, of which our well-respected doctors have ongoing professional experience.

Healthy employment levels in a variety of sectors in Pictou County are absolutely required of course; but one's health comes first, before one can be employed or continue to be employed, and actually get to enjoy the results of that labour.

I have great faith in the resilience and capability of the people of Pictou County. I believe that the local community as a whole will be very capable of responding positively to future opportunities for economic growth and prosperity, once the crucial environmental issues have been both fully acknowledged, and fully addressed, by those in positions of responsibility in this matter. This absolutely needs to be done, in the best interests of all who live and work, or visit our historic, and very treasured part of Nova Scotia.

Sincerely yours,

Sent from [Mail](#) for Windows 10

From:
To: [Environment Assessment Web Account](#)
Subject: Response to Norther Pulp's Environmental Assessment
Date: March 9, 2019 8:07:17 PM
Attachments: [submission to NSE re Northern Pulp.docx](#)

Please find attached our concerns regarding Northern Pulp's environmental assessment in relation to their new replacement effluent treatment facility.

Thanking you in advance for reading my letter of concern.

Thanks

Dear Margaret Miller and Nova Scotia Environment team

We are writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project. We own two businesses in the Province of Nova Scotia. A commercial fishing business located out of Caribou, NS and a small trucking company located out of the Town of Pictou. We are parents and property owners and most importantly tax payers of Nova Scotia.

After weeks of reading the environmental assessment submitted by Northern Pulp, I have many concerns; however, I do know there are hundreds of people including chemists, biologist, doctors, engineers, scientists and other knowledgeable folks that are writing in with their concerns regarding same. On that note, the following document submitted by us will include a bit of our personal issues and of course leaving out lots to the professionals that have already submitted.

The EA starts off with the Executive Summary providing a table indicating the "significance of project-related residual environmental effects on 18 items. And for some miraculous reason every single one of them is assessed at "NS" or No Significant Residual Environmental Effect Predicted". Well I can predict that I will win the lottery next year but the chances of that are slim to none. So, lets cut the bullshit!!! So as Joan Baxter states in her article in the Halifax Examiner on March 5th, 2019 *Northern Pulp's environmental documents: In other words, the on-site Activated Sludge Treatment system will effectively treat millions of litres of toxic pulp effluent a day, every day, without a hitch. The 36-inch diameter pipeline that will run 11.4 km across the causeway and then overland beside Highway 106 to Caribou Harbour will never leak or spill its contents in the Pictou watershed, or negatively affect the scenic landing point for the PEI ferry that brings tens of thousands of visitors to Nova Scotia each year. The 4.1-kilometert pipe into the Northumberland Strait that will dump millions of litres of effluent a day into the rich fishing grounds will not harm fish habitat or the ecosystem. The "dewatering process" of the sludge from the treatment facility will work well, and there is no need to worry about burning it in the mill's power boiler, even though that boiler has already caused many emissions problems.*

Within this document we will give our reasons why this project will cause adverse effects or significant environmental and health effects, negative economic effects and mitigation or lack there of, of same.

Some of our concerns with Northern Pulp's environmental assessment:

In this section we will refer to some of the concerns, discrepancies and wrong information that has been submitted by Northern Pulp.

Human Health

I live approximately 3 km from the stacks at Northern Pulp. We suffer with our breathing here. Especially on humid days. The smog sits on top of our Town and penetrates into our homes and our lungs. We cannot open our windows. I had to cut 22 trees out of my yard so that the heavy smog would have a chance to flow through as opposed to sit stagnant. I know that none of you reading this right now know exactly what that means. Maybe in the next 20 days you should take a drive down to Pictou or Pictou Landing and take a nice long inhale. You should come in the middle of the night to see 23 stacks blowing smoke while people are sleeping and then only 11 in the day. This is a regular occurrence as I work night shifts and have the pleasure of witnessing this questionable activity.

Section-9-15 Human Health Evaluation: the consultants compared the "potential human exposures and risks associated with a marine treated effluent discharge" from a Kraft pulp mill in Bell Bay Tasmania. However, it would be impossible to compare the two because **IT DOES NOT EXIST!!!! Remember this is the section where they assessed the possible impacts of human health! And remember that they determined that by comparing the two that there would be no significant health impacts!! From a mill that DOES NOT EXIST!!!!**

This is all I should have to write, but I will continue.....

Mercury:

Oh wait! Northern Pulp didn't mention all the mercury that they have buried on their property! In fact, they didn't mention any of the mercury. Nova Scotia Department of Environment know about the Mercury, Northern Pulp knows about the mercury and Dillon Consultants know about the mercury; yet no mention of it in the environmental assessment!

Mercury is an environmental toxin which is persistent and bio-accumulates. It does not "go away" it can build up in the environment and in the food chain. There is no known safe level of human exposure to mercury.

Northern Pulp consultants told me at the open house that there is no mercury in their effluent. When I read the reports from the raw effluent spill from 2014 there were substantial amounts of mercury found. So why did they lie to me? Maybe they didn't think people would get their hands on those reports?

It is my opinion that given the fact that Northern Pulp has neglected to include this extremely crucial portion of concern, that the Minister of Environment should request a full impact study on this material alone. And demand proof that there is no mercury on site at Abercrombie Point as Northern Pulp is claiming

Section 8.3 Soils and Geology in relation to scallop fishing

The assessment talks about the type of bedrock along the land portion of the pipe but fails to mention any of the bedrock along the marine portion. What we do know about the bedrock along the marine portion and the outflow portion is that it is constantly changing. fishes scallops along some of this area. From year to year as he drags the ocean floor and the materials come up in his baskets onto the boat, he gets a first hand look at what is on the ocean floor. From his 23 years of experience not one year is the same as the next in the exact same location. For example (North South 14,316 and East West 29,820) in 2017 had huge boulders and huge rocks (granite, coal, shale, sandstone are some examples). So big in fact, that the weight broke cable. But in that exact same location in 2016 the ocean floor had mud and only mud. This is the same with all areas that fishes every year for the last 23 years.

There is no mention of coal. There is a substantial amount of coal on the ocean floor sub surface as well as surface all along the pipe location and outflow location. A conversation I had with a geologist from Nova Scotia said “disturbing coal deposits releases methane. Methane in either air or water isn’t good. The submission is missing this information! Information that is a necessity to evaluate the impacts of the project.

I believe more information on coal deposits and the effects of disturbance and the geological report for the marine portion of the project is needed before the Minister can make a decision.

Table 8.6-2

Seasonal Sensitivity of “freshwater” fish species potentially occurring in Local Assessment Area

The chart shows zero sightings for all species including white sucker, mummichog, minnows, perch, rainbow trout, gasper au, Atlantic salmon, brook trout, and brown bullhead. sees minnows, mummichogs, rainbow trout when he is smelt fishing. They are known to inhabit brackish waters and fishes smelts adjacent to where this sight test was conducted. Gaspereau frequently come up in his traps and are a feeding fish for lobster. It is very well known that Atlantic Salmon are certainly plentiful in the area.

Just because someone put a net out for a day and didn't catch any of the species on the list, does not mean they don't inhabit the area!!

Fishing and Recreational use of the Outflow Area:

THERE IS 100% COMMERCIAL FISHING AND RECREATION ON, NEAR, AROUND THE LOCATION EXTENDING THROUGH THE WHOLE GULF REGION!

We hold licenses for 7 species in the exact location and beyond the pipe and outflow location. They include smelts, herring, swordfish, scallops, mackerel, squid and lobster. We recreationally fish bar clams, bass and mussels from the exact locations as well. Our freezer is full of bass, clams, lobster, scallops. If this pipe goes out and pumps and unidentified liquid at a relentless amount of 85 million liters per day, every day, all of this will be ruined. I cannot consume, nor give my child and other family member, friends and stranger, food that has ingested or absorbed an unidentified effluent!!!! Think about it. Or better yet, I will go over to the lagoon at Boat Harbour and grab a big pot full of effluent and cook you all up a big feed of lobsters, then you can make a decision on if this should go out into the Strait!

Recreation on this body of water and the surrounding beaches is huge! Boaters, swimmers, kayakers, beach combers, cottagers and a Provincial Park.

PERSONAL ECONOMICICS

was 22 years old when he bought his commercial fishing gear and licenses. He is a third-generation fisher and fishing is in his blood. This isn't a cliché statement, this is the reality in a fishing community in NS. We have invested 1.6 million dollars over the years into this business and this is our retirement. If this project is approved and a pipe goes out into the Northumberland Strait, we will lose our stewardship. We are done! Everything we have worked for will be gone. Please consider our plea. We hire local people, we invest in the local economy. We pay substantial amount of taxes each and every year.

End Summary

I am keeping my submission short because I know of all the professionals that are taking on each and every piece of this assessment will have a thorough and fact-based submission so I will leave the scientific and technical stuff to the professionals.

We feel that Northern Pulp's submission does not prove a lack of significant risk, and is missing critical data on many issues. There is insufficient evidence to know exactly how broad any damage might be. The company's claim that damage will be "minimal" is not credible because they have no data to back up claim....just words. Fisheries, tourism and outdoor recreation are very important economic factors that should absolutely not be put at risk. As far as consultation goes: The United Nations Declaration on the Rights of Indigenous Peoples requires not just consultation, but consent by the local Indigenous population. Pictou Landing First Nation is opposed to this proposal. The company promised community consultation and we did not receive that after the first proposal was squashed by the company. We must reject Northern Pulp's proposal and close the effluent treatment, Boat Harbour on schedule.

Please reject this proposal by Northern Pulp! We cannot mitigate the Northumberland Strait. We cannot ruin an entire fishing industry. We cannot ruin our environment. We cannot put people's health at risk!!

From: @hotmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 8:21:52 PM

Project: replacement_effluent_treatment_facility_project Comments: Please take the steps that are needed to advance this Project forward. I am sure the technology is there to keep our waters and land safe and that Nova Scotia can step up to the plate and keep this Pulp Mill operating and contributing to our economy as it has for so many years. Name:

Email: @hotmail.com Address:

Privacy-Statement: agree x: 56 y: 21

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 8:36:14 PM

Project: replacement_effluent_treatment_facility_project Comments: This is a positive project, proven technology that will treat effluent to a very high standard of safety for fish and humans. Similar process at Port Hawkesbury has run successfully for close to 25 years. Unfortunately much of the media reporting about this project has been extremely biased and not fact based - this is not about jobs versus environment - it is about protecting the environment and the jobs in the forest industry! I support this project completely. Name:

Email: @gmail.com Address:

:

Privacy-Statement: agree x: 61 y: 25

From: |@gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 8:37:53 PM

Project: - Choose - Comments: I wish to convey this project, as presented, should not proceed. The life expectancy of the mill was reached back in the late 1980s, and it would be sad if it is allowed to continue to operate, poisoning our water and air and making people and ecosystems sick. Little analysis has been done on the impact on larval lobster and the Northumberland Strait is already loaded with many cumulative environmental stressors. Adding pulp waste directly to the Strait is a completely different process than running it through the Boat Harbour Tidal Lagoon with a 30 day retention time that allows solids to settle. Adding the hot pulp mill effluent with the slurry of toxins directly into the Strait has the potential to really impair the Northumberland Strait well beyond what it is now. It could be very damaging to commercial fisheries, which I am sure nobody wants to destroy. Given the risks and scale of this project, I dont see how anyone could logically say it the impacts can be mitigated. On the Forestry side, the crown forests of Nova Scotia have been largely destroyed, given away to wealthy foreign companies over the last 5 decades to produce low value pulp. There isnt much left to cut, and so why keep a dying industry with depleted resources going? We should be building our forests to be climate resilient and harvesting wood only through selective cutting for the highest value, not clear-cutting land for low-value pulp. The time has come for change, and the days of industry polluting and destroying public resources, at taxpayers expense should be over. I say yes to human health, clean water, biodiversity and sustainable resource-based industries and NO PIPE, NO MILL. The Mill has had ample opportunity to put a better plan in place, and the fact they did not do their homework simply shows their commitment to NS. I feel the NS government is in a serious conflict of interest since they are financing a lot of the work while their job also entails regulating the mill. I feel the proposal would pass the Federal Environmental Assessment process, if one were required. This really disturbs me, but our standards need to change with the times. Dilution should not always be the cure for pollution. We know better now, or at least we should. At the end of the day, if this project proceeds, the legacy of environmental damage will continue. Thank god we have a fabulous book that provides a social lens perspective on the mill since its early development back in the late 60s. We now have the opportunity to learn from the past mistakes and put a priority on human and ecosystem health. We need to do better than this proposal to simply dump it directly into the Strait. Name: Email: @gmail.com Address:

: Privacy-Statement: agree x: 59 y: 20

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Pipe and diffuser proposal
Date: March 9, 2019 9:02:56 PM
Attachments: [NSEno pipe.pdf](#)

My submission in PDF format included

– Fisher
Chairman; Gulf NS Herring Federation

Feb 23, 2019

To: Nova Scotia Dept. of Environment

Dear Sirs/Madams,

Northern Pulp, a bleached Kraft pulp company (and the Province of Nova Scotia) are planning to construct an effluent pipe with a difuser at the location of the red star in the diagram below. The pipe is to replace the Boat Harbour Effluent treatment facility due for closure in January 2020. Boat Harbour is deemed to be one of the most toxic sites in Canada and has been a horrific injustice inflicted on Pictou Landing First Nations for over half a century.

This proposed pipe is designed to discharge up to (66)(93) million liters of 37 degree + 'treated' effluent daily into the Northumberland Strait, right in the middle of the last major active spawning area for 16F herring. The complex tides in this area, both in speed and direction, would ensure that the effluent would settle out across the entire remaining herring spawning grounds. This is the most dynamic area in the Eastern Northumberland Strait and a critical spawning ground for Lobster, Rock Crab, Herring, Ground fish and many other species.



The effluent will pour into Caribou Harbour on the rising tide and settle atop oyster beds and the salt water intake of the only fish processing plant in the area. On any given day during lobster season 100,000 pounds of live lobster could be floating in cars within Caribou Harbour directly in the path of the effluent stream.

The local Herring Spawning Stock is depleted and in the Cautious Zone and the reason for the decline is not understood. This is a Gulf of Saint Lawrence wide phenomenon. The local spawning area

has compressed in the past few years, as the stock declined to the areas outlined above. Other areas in the Eastern Gulf are in even worse condition. The Fisherman's Bank population has all but collapsed and the Northeast (North Lake) component was absent this year!

The Gulf of St Lawrence is an inland sea with counter clockwise currents that only exchanges its waters with the Atlantic once a year. It is one of the most precious marine ecosystems on earth with thousands of marine species who, spawn, nurse and migrate annually and has sensitive life stages of marine organisms present year around. It provides sustainable multi species fisheries for coastal communities in NS, NB, PEI, QC and NL. Given the rapid deoxygenation now happening in this fragile body of water (see link below), the Gulf of St Lawrence needs immediate protection, not further degradation. Most seriously, it does not need 'treated' Kraft bleached pulp effluent going into sensitive herring spawning waters, now or ever.

<http://www.digitaljournal.com/tech-and-science/science/new-study-gulf-of-st-lawrence-shows-a-dramatic-oxygen-decline/article/532340>

Given that DFO scientists recently reported a disturbing picture for the southern gulf of St Lawrence cod, warning of extinction by mid century, (see link below), where is the Precautionary Approach? Habitat Management? Marine Protected Regions?

<https://www.cbc.ca/news/canada/nova-scotia/southern-gulf-of-st-lawrence-cod-could-be-extinct-by-mid-century-report-1.4966889>

The Proponents paint a picture of this effluent as almost pure holy water. They claim it surpasses all Provincial or Federal guidelines for effluent discharges yet it created one of the most toxic sites in Canada at Boat Harbour. Any online search of pulp mill effluent turns up articles with quotes like,

- *Environmental effects on the marine environment are particularly poorly researched, even though some of the limited amount of data available suggests that lignin breakdown products of high molecular weight are not only persistent, but also highly toxic to sea urchin eggs, sperm and mussel larvae. (Gary Cherr, Bodega Bay; paper is available from ECOPOL)*
- *The role of non-bleaching factors is big and pulp wash water for example, can be more toxic than bleach plant effluent.*
- *chlorate will compete with nitrate for uptake by algae, yet chlorate acts as a herbicide rather than a nutrient.*
- *Chlorate is efficiently removed through anaerobic secondary treatment systems (eg. Lagoons), but removal in activated sludge systems is not as successful.*
- ***These long-term fish exposures are laborious, time-consuming, and expensive. However, they provide some of the most convincing evidence linking PME (pulp mill effluent) exposure to reproductive effects in fish.***

The list goes on and on with reproductive effects being flagged in most instances. Poorly understood "reproductive effects" are not too comforting when the herring stock is in need of rebuilding and this project proposes to saturate the spawning grounds with toxic effluent.

The proponents claim this effluent will be non-detectable at 100 meters. That's magic. I would question the sensitivity of the detectors or what exactly they are attempting to detect. We challenge you to go down to Boat Harbour and stand there for 10 minutes. The treated effluent is certainly detectable there at 100 meters.

This Effluent Pipe and proposal has been presented twice in the past, first in 1994 and a variation in 2004. The first of these, "The Initial Environmental Assessment for the Boat Harbour pipeline and diffuser" proposal was presented in September of 1994 and "Returning Boat Harbour to a Tidal Estuary" in 2004. Neither passed muster at the time and either failed environmental assessment or were abandoned for other reasons. Details in writing on the abandonment of the proposals are sketchy but no PIPE ever went out into the Strait.

Your Nova Scotia Department of Environment has diminished this toxic pipe proposal to "an addition to an existing facility" and as such, subject to only a Class 1 Environmental Assessment rather than a more rigorous Class 2 assessment. This is inaccurate and irresponsible. The increase in suspended solids with this proposed new AST system and its inevitable settling on spawning and nursery grounds should trigger the most vigorous assessment and likely scuttle the project entirely. We implore you to examine this project closely and recommend it for a more vigorous and comprehensive Class 2 assessment.

Respectfully,

- Fisher

Chairman: Gulf NS Herring Federation

<http://www.saveourseasandshores.ca>

EA@novascotia.ca

From:
To: [Environment Assessment Web Account](#)
Subject: Letter in response to Proposed Effluent Treatment Facility Northern Pulp
Date: March 9, 2019 9:29:38 PM
Attachments: [Submission.pdf](#)

March 1, 2019

Dear Minister Miller,

I am writing in response to the Northern Pulp Replacement Effluent Treatment Facility Project. I am a resident of the town of Pictou, an outdoor adventurer, a social worker working locally with children and families in the community, and a member of a fisher family. My partner and his father have harvested lobster and herring from the Northumberland Strait for 25 years.

In many respects, my position on this topic is largely intersected by the tensions in my identity as a resident of Pictou County, a civil servant to the community, and member of professional body devoted to advocating and promoting social justice and equality for all persons.

In my submission, I will express three (of many) concerns as they relate to the proposed project, and the process in which this submission has been reviewed with the community. These three concerns include the lack of community consultation, the potential impact on the Pictou Water Supply, and the lack of concrete evidence based assessments included in the environmental assessment at time of submission.

As a member of this community and a taxpayer in the province of Nova Scotia and the town of Pictou, I have become very concerned about the proposed project to replace the current Boat Harbour Treatment Facility. As a member of the Nova Scotia Association of Social Workers it is inherent in my professional values and ethics to uphold equality, autonomy, and social justice for all. The treatment of the first nations community in Pictou Landing over the past 50 years is abhorrent, and I acknowledge that Boat Harbour must close.

As a member of my community, I have worked to educate myself on the issues surrounding the Northern Pulp Effluent Treatment Facility Project over the past fifteen months since the announcement of the initial proposed project. My involvement with the Friends of Northumberland Strait group has included participating in planning and coordinating efforts as a committee of well-organized volunteers. Despite having substantial background knowledge on the subject and being a university educated professional, reading the entire proposal, consolidating my concerns, and articulating my questions has been extremely challenging. I have read much of the documentation provided by Northern Pulp, attended the open houses in December 2017, submitted questions and concerns, and I still find that the method in which this information has been communicated to the wider community has not been accessible to the people that a decision of this magnitude will impact. With a below average literacy level in the province of Nova Scotia (Literacy Counts, Statistics Canada, 2010) which is compounded by other socioeconomic issues faced in rural communities such as Pictou County, the process to review, evaluate, and respond to the 1700-page proposed project has not been fair.

The new route (which runs through the watershed that my community draws its water supply from) has not been presented to my community (the Town of Pictou) in the form of an open house. The public has had limited time and opportunity to digest the volume of materials that have been provided to them to consider in this very important proposal, and they have not been provided an opportunity in the form of a public consultation to review and reflect as a community on the project. In the absence of open houses (with the new proposed outfall location in Caribou), town hall meetings, and accessible, factual, and comprehensive information, the public and community at large is at a tremendous disadvantage to communicate and understand their concerns as they relate

to the proposed project. From my work in the past with community development, critical aspects to build relationships and trust within a community come from open and transparent dialogue that includes all stakeholders. If this community, government, and corporation (Northern Pulp) have learned anything from the legacy of Boat Harbour, is that the community must be consulted in a transparent, truthful, accessible, and meaningful way.

In Section 6.5.1 under Engagement Activities of the Project Re-Design (Northern Pulp Replacement Effluent Treatment Facility, Environmental Assessment Scopes and Methods, 2019, pg 106) there is an absence of engagement with the broader public, including an absence of engagement with the Residents of the Town of Pictou. As the project will have a footprint over portions of the town's water table (Environmental Effects Assessment, Northern Pulp, pg 186), it is my understanding the people of the town of Pictou and the Municipality of Pictou County would be considered stakeholders, and the insinuation that Northern Pulp has met with all relevant "stakeholders" throughout the course of the consultation period of this project is misleading.

As a resident of the town of Pictou, the water supply issue is of tremendous concern. The possibility of a spill or leak in the pipe over the town's water supply, and what impact this could have has not been addressed in the Environmental Assessment Registered by Northern Pulp. In October 2018 the town of Pictou announced the opening of a 5.8 million dollar investment to improve water quality and build a Water Treatment Facility (www.townofpictou.ca, New Water Treatment Plan Officially Opened, 22 October 2018). Water quality issues have been longstanding and painstaking in the town of Pictou. I have relatives who live in Pictou Landing First Nation who in 2014, 2017, and again in 2018 have been unable to drink their tap water due to spills, and possibility of contamination from the effluent being transported and treated in Boat Harbour. In Section 8.5 outlining Groundwater issues and their relation to the Town of Pictou water supply, there is an absence of clear, documented mitigation efforts that are evidence based to prevent contamination. There is an absence of reference to a specific mitigation/ground water monitoring systems that would alert necessary parties to a spill or leak, and possible contamination of water supply. The environmental assessment references that it is still unknown and unclear what exactly will be in the effluent, the parameters of monitoring and understanding the implications of a spill into a water table are yet to be determined.

The Environmental Assessment is missing important facts. On Page 12, paragraph 3, the Environmental Assessment reads "due to the EA registration timing, the study period did not facilitate a full biological field assessment for the corridor". Unfortunately, upon review of the document, there are several assessments missing from the report, and frequent reference to "will be completed upon permit" and "will be completed upon approval". Reasons listed include "seasonal constraints", "physical opposition and obstruction" (pg 12). These studies include things that are seemingly critically important to a decision on an approval for the project, including marine life studies, human health studies, and biological field assessments. This illustrates a lack of information and an incomplete assessment of the true impacts of the proposed project.

As a child I had friends who attended the Camp MacLellan United Church Camp when it was open. MacLellan Memorial Camp is situated approximately 7 km from the Boat Harbour Treatment Facility. The camp has since closed, but what I vividly remember from hearing about my friends' time there, was that they were not allowed to swim in the ocean because of contamination. This continued, until the last year the camp was open (2015). In fact, the camp had an inground swimming pool due to the issues with water quality and contamination in the beach. In 2013 When I picked my little sister up from attending her week at camp, she had a wonderful time talking about memories with her friends, but acknowledged that it was a shame they could not swim in the ocean there, because of "the stinky Boat Harbour". The outfall location of the proposed project is approximately 4.1km from the Northumberland ferry wharf, taking it approximately 5km outside of one of the most popular beaches visited by tourists and locals around. The Caribou Provincial Park is where I spend every day walking, in the summer it is where I swim, and it is where I want my children to swim. Reflecting on what the water looked like in MacLellan Memorial Camp on the beach, and the contamination that occurred on that shoreline as a result of discharge into the strait following effluent treatment from Boat Harbour, I cannot help but think of the careful measures that were taken to prevent children from swimming in that water due to contamination. I am struggling

to understand how constant flow, with an undeterminable end, of effluent can be discharged within 5 km of one of our provincial treasures, Caribou Provincial Park, and jeopardize the ability of children and families to enjoy what this coastline can offer.

Based on what I have outlined above, there is not enough information available to approve the Proposed Effluent Treatment Facility Project as submitted by Northern Pulp. I am asking that the Minister order an Environmental Assessment Report, to allow the most in-depth and comprehensive understanding of the complex issues that could face this project, including the impact of adverse effects.

Thank you for your careful consideration and review of the concerns relating to this project,

From: @ns.sympatico.ca
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 10:08:40 PM

Project: replacement_effluent_treatment_facility_project Comments: To Whom It May Concern: I am opposed to this project on jurisdictional, environmental, and human health grounds. First of all, it should be undergoing the more extensive federal environmental assessment, as it involves probable deleterious effects on nearby oceans, navigable waters, commercial fisheries, fish habitat, and the health of residents of the Pictou Landing First Nation. All of the above are primarily federal responsibilities. Proponents of the proposed effluent pipe claim that a closed loop system of bleach kraft effluent is not viable. This assertion needs a much more rigid analysis by an independent party. I am opposed to further dumping of effluent, containing toxins and nutrients, resulting in increased chemical and biological oxygen demand in the receiving waters. Where are the studies of potential long-term toxicity of the proposed effluent to marine life, particularly to species targeted by commercial fishers? There are none. Instead, we are told that the pulp mills effluent is too toxic to be reused within the mill. The current proposal is full of models, assumptions, and simulations yet in the final analysis we cannot tell what will happen to the Northumberland Strait marine environment and its fisheries and our health should the toxic effluent pipe be approved and constructed. Approval of the proposed project would constitute a giant leap of faith, a major uncontrolled experiment with no backstop. It is contrary to the precautionary principle and should be rejected in its entirety. Name: MD Email:

@ns.sympatico.ca Address:

Privacy-Statement:

agree x: 51 y: 21

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 9, 2019 10:18:12 PM

Project: replacement_effluent_treatment_facility_project Comments: Evidence based decisions Born and raised by the water in the community of Little Harbour, the writer has invested a lifetime of work in Pictou County and is a multiple stakeholder with residential land on both the mainland and Pictou Island, an aquaculture operation, and several working woodlots. Since its inception, the pulp mill has had very real environmental and health related issues. The eerily deadened Boat Harbour " the once vibrantly alive tidal estuary that the pulp mill effluent passes through on its way to the Northumberland Strait " is now classified as a hazardous/toxic site. According to the provincial government <https://novascotia.ca/boatharbour/about.asp> over 200 studies have identified sediments including: o Cadmium o Dioxins o Furans o Mercury o polycyclic aromatic hydrocarbons PAHs o petroleum hydrocarbons o zinc In January 2020, when Boat Harbour will close, it has been proposed by Northern Paper that a pipeline be built out into the Northumberland Strait to take its place, directly discharging the effluent there. It is worrisome that those wastes, once deposited in Boat Harbour, will now flow directly into the Northumberland Strait. Particularly in light of the following: NORTHERN PULP, ACCORDING TO ITS OWN DOCUMENT, STATES IT DOES NOT KNOW EXACTLY WHAT WILL BE IN THIS EFFLUENT, NOR HOW MUCH: o "oAt this time, effluent chemistry characteristics including the specific substances present in treated effluent and their anticipated concentrations will not be known with certainty until the project is operational. Some other current areas of uncertainty include limited recent or current baseline environmental media and marine food item chemistry data "!"â? NORTHERN PAPER, ENVIRONMENTAL ASSESSMENT REGISTRATION DOCUMENT, Replacement Effluent Treatment Facility, January 2019 NORTHERN PULP TECHNICAL MANAGER STATES THAT EFFLUENT QUALITY WILL BE WORSE o " oSome say effluent quality will be worse than today because of all the polishing that is happening across the Boat Harbour basin and they are correct to some extent " Quote by Northern Pulp Technical Manager, November 2017 document obtained through Freedom of information. <https://www.cbc.ca/listen/shows/information-morning-ns/segment/15672343> This proposed effluent disposal method has the potential of causing extreme environmental harm. It is therefore imperative that all decisions are rigorously evidence-based. For your consideration. Name: Email: @gmail.com Address: Municipality: Postal-Code: Phone: Fax: ### ### - ##### email_message: Privacy-Statement: agree x: 54 y: 28

From:
To: [Environment Assessment Web Account](#)
Subject: Northern Pulp Replacement Effluent Pipe
Date: March 9, 2019 10:45:22 PM

Please accept this as my reasons for requesting a rejection of the current proposal submitted by Northern Pulp for their replacement of Boat Harbour.

1. They have submitted a plan to pipe effluent at several degrees higher than normal receiving water temperatures into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard.
2. They have submitted a plan to pipe effluent containing one ton of solids per day into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard.
3. They have submitted a plan to pipe effluent containing toxins, including dioxins and furans, into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard.
4. They have submitted a plan to pipe effluent that is worse in character and quality than that which currently leaves the Boat Harbour estuary, by their own account, into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard.
5. They have submitted a plan to pipe effluent containing unknown levels of toxins, by their own account, into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard.
6. They have submitted a plan to pipe effluent into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard, that has twice been rejected when submitted previously. Which also leads to the value for tax payer dollars supplied to Northern Pulp, to recycle this twice rejected plan. It also casts doubts in every claim about about tight time lines. Doubts that cause anger. Was this recycled plan worth \$6 Million?
7. They have submitted a plan to pipe effluent through a well field and watershed, essential to the local homes and broader community for water and then release the effluent into a vital ecological and highly stressed area of our ocean, that cannot endure further disregard. How many leaks and ruptures in this company's pipe does it take for this idea to be be deemed blatantly insane?
8. The proposal includes a request to give the company an additional 21 months to build said pipeline..... they had 6 years to develop a plan, and seek approval. They waited until 2018 to submit a recycled and twice rejected plan.
9. Part of their current Industrial approval, issued in 2015, included the requirement for flow metre to be installed on each end of the effluent pipe, to monitor for leaks. This has never been done. They are in violation of their current industrial approval.
10. How does one test the output on the diffuser end of the pipeline? As in, toxins, temperature, etc.

11. At a time when food security is paramount, and water resource is crucial, this mill using the volumes of fresh water daily to dilute their poisonous sludge to "meet" regulations, while risking a major food source, not to mention an economic driver in the province, is inherently unlawful.

12. The mill has issued varied statements in the media, in their proposal and in court documents about the jobs that will be impacted by a closure. I would advise that the legally binding numbers are likely the most accurate at less than 1,000, and would hope that all the noise and bolstered confusion over the future of Nova Scotia's forest industry could be cleared up with another recent bit of insight regarding PHP importing wood and wood chips from NB and Quebec at much higher rates than NS forestry companies are being paid by Northern Pulp.

13. How many fishery jobs will be impacted by this proposal?

I have many other concerns, but I feel these are fairly easily understood and are the ones that stand out for me.

Regards,

From:
To: [Environment Assessment Web Account](#)
Subject: [PROBABLE-SPAM] EA -Northern Pulp Replacement ETF
Date: March 9, 2019 11:28:11 PM
Attachments: [EA submission Northern Pulp](#) [docx](#)

Please find attached my comments on the Environmental Assessment of Northern Pulp's proposed Replacement ETF.

I would appreciate acknowledgment of receipt of my submission.

March 9, 2019

Re: EA Northern Pulp Replacement Effluent Treatment Facility

Dear Minister Miller,

I live in Pictou County, overlooking the River John, as it flows into the Northumberland Strait. I have spent the last 16 months educating myself about what Northern Pulp's proposed new ETF could mean for the Strait, for those who fish its waters, enjoy its beaches, value its complex ecosystem and love its beauty.

In that time, I have learned from fishermen many things I did not know before. I learned that lobster thrive on the rock crab that are plentiful in Caribou Harbour, that scallops release 6 million eggs, but only one develops into a scallop, that small changes can lead to marine life leaving an area where they were previously plentiful. I have learned to appreciate these waters in a way I did not before. Fishermen understand ecosystems, that the smallest to largest of marine life, plant and animal, depend on each other and the conditions they live in. I am in awe of the detailed knowledge that fishermen have of the waters, tides, currents, bottoms and creatures where they fish, because their livelihoods and their safety and the safety of their crews depend on this knowledge.

I also learned that fishermen make changes every year at their own expense in order to protect the future of their industry and to protect the environment. One example is voluntarily increasing the carapace size of lobsters which they take, which means a smaller catch in the short term but a healthier and more productive population in future years. Another example is the changes in quota which can be announced suddenly by DFO, and may mean a 50% or more decrease in allowable catch from one year to the next. Or, as last year, the closure of the lucrative snow crab fishery for part or all of a season in order to protect Right Whales.

This is the reality of life for fishing families. They do not have an automatic entitlement to make maximum profit – their profits are constantly balanced by the need to protect the environment and the future of the fisheries.

Lack of adequate public consultation

I have spent the last month immersed in 1700 pages of documentation which the public was given only 30 days to read, understand and respond to. I believe that this was not an adequate process of public consultation, especially as no Open Houses were conducted on the proposal including the new route, new outfall location, and many differences in technology, including a missing oxygen delignification system.

Lack of critical information

In those 1700 pages there are many issues to comment on. Among other issues, there is the lack of critical information on effluent composition and on the majority of the VECs, the absence of water analyses from Caribou Harbour, and the use of baseline water data from Pictou Harbour as "proxy"-- which Northern Pulp itself admits is more polluted than Caribou

Harbour -- and the very strange use of an HHE report based on a human health risk analysis of a mill-that-never-existed. I would have thought those omissions would have led you as Minister to refuse registration of the project documents as incomplete. But that did not happen, so I would hope these serious omissions will stand as red flags to your department now.

A vibrant ecosystem

Northern Pulp either exhibits no understanding of ecosystems, or does not want the Minister to understand that Caribou Harbour is a complex and vulnerable ecosystem full of life.

There is one photo which I found particularly striking.

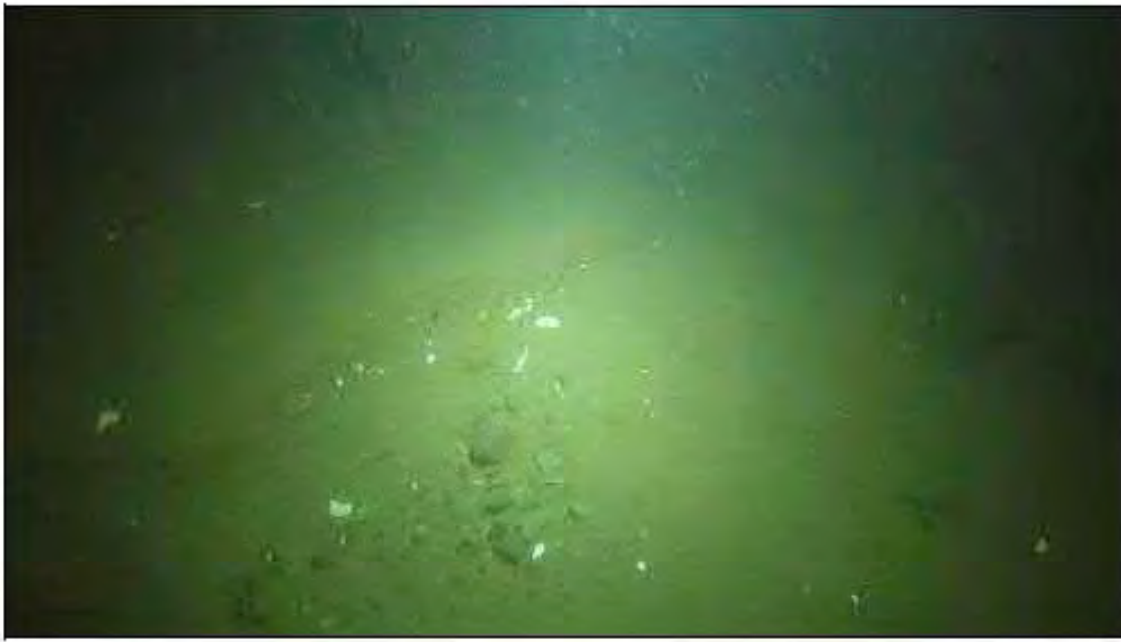


Figure 8.12-1 on page 363 is a still photo of the bottom of Caribou Harbour. The caption states that it is devoid of macro flora and macro fauna. What is odd is that, according to Graham Edgar, Professor of marine ecology and conservation science at the University of Tasmania macro fauna are "the small invertebrates that are just marginally too small to see with the human eye." So macro fauna would not be seen -- how can the author conclude it is devoid of macro fauna?

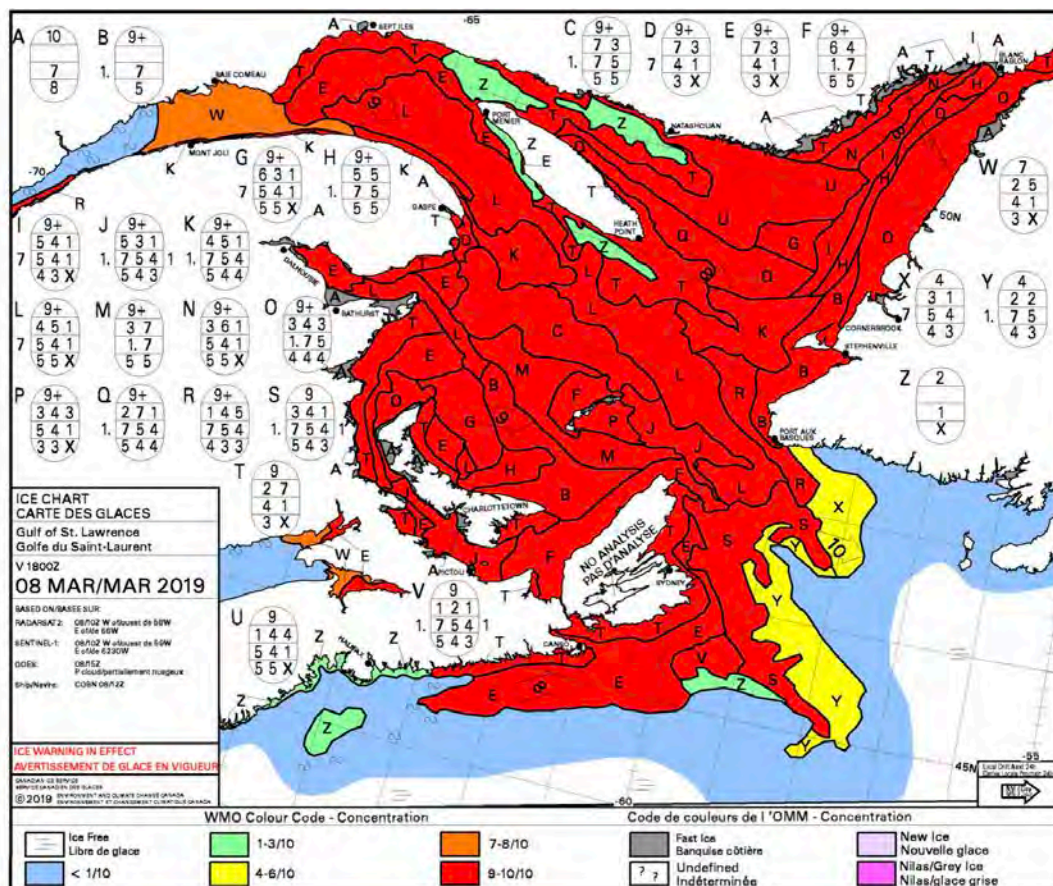
The purpose of the photo seems to be to imply that the bottom of Caribou Harbour is devoid of life. Nothing could be farther from the truth. Under that sand there could be a thriving population of bar clams, rock crab, and other species for whom Caribou Harbour serves as habitat and nursery. Floating in the water there could be many life forms, from plankton up, in various life stages, all of which are critical to a healthy ecosystem.

Ice

I would like to point to the high likelihood of ice damage to the pipe, and the inability of Northern Pulp to repair that damage in a timely way, even if it were identified in a timely way.

Northern Pulp only looks at the possibility of ice damage to the diffusers, which is dismissed as being taken care of by normal tides and currents. If that were true, diffusers would not be required. And differences of diffusion under ice conditions are ignored.

But an even greater issue is the risk of damage to the pipe itself in the shallow waters of Caribou Harbour. The proposed outfall location is in a “hole” 20 metres deep, in a narrow channel. The depth of the majority of Caribou Harbour, both closer to shore and on the far side of the proposed diffuser location, is from 0 to 8 metres deep. Damage to the pipe before it reaches the diffuser would take place in a shallow area, where sufficient flushing would not occur. The result of damage to the pipe could damage the entire rich ecosystem of Caribou Harbour for many decades. This is not a small possibility, it is a likelihood, according to fishers and a master diver I have spoken with, all of whom have watched the force of ice in the area for years and have made their own submissions to this EA.



In 10.4.4.1, Northern Pulp states, “Upon detection of any marine outfall pipe damage or diffuser fouling, repairs would be promptly performed.” **This is impossible.** Ice locks in Caribou Harbour for four months or more in the winter. The ice map of March 8, 2019 gives an indication of the thickness of ice in the area as well as the presence of fast ice in the Caribou area. It is during these winter months when the likelihood of damage to the pipe itself or diffusers, is greatest.

The Minister should consider the issue of likely ice damage to the pipe as establishing a likelihood of harm which is not mitigable. The force and duration of ice cannot be changed. The vulnerability of a pipe in those conditions is established in other submissions. The danger to Caribou Harbour is established by the fact that Northern Pulp did not choose an outfall location in the Harbour itself.

As well, the Minister should be warned by this casual reassurance of timely repair which is clearly impossible for 1/3 of the year. The Minister should take this example as a caution in relation to Northern Pulp’s many other breezy reassurances that no harm will be done or that it is mitigable, with no detail provided.

Mercury risks

Finally, I would like to raise the issue of the known presence of mercury contamination from the Canso Chemicals plant in bedrock and in 1990s era “secure landfills”, on the site adjacent to Northern Pulp very close to where the plan is for components of the proposed ETF to be set into the ground at a depth of 7 feet, requiring digging to that depth or more.

This issue only came to public attention several days ago through the release of information from the 2000 Decommissioning Report of Canso Chemicals. This raises complex risk issues which the Minister must insure are fully investigated and evaluated in the public eye, not behind closed doors, to determine whether the construction or operation of the proposed new effluent treatment plant could increase or hasten release of mercury in soil, air or water. Given that the previous elemental chlorine process used at the mill would have involved mercury, the attention given to Canso Chemicals raised questions for me as to whether the Northern Pulp site itself might also have some mercury contamination that could be released during construction or operation. These are issues that must be fully examined prior to approval of this project.

Northern Pulp’s summary no-harm-ever-to anything chart is not credible

Northern Pulp’s summary chart says that under no conditions, normal operation, malfunctions, accidents, will any significant residual harm be done to anything. That conclusion is not credible.

We can look at dead zones and environmental degradation attributed to pulp and paper mills in other locations or we can look in our own back yard to question that sunny conclusion. For almost three decades now, Boat Harbour Basin has been the Receiving Water for treated pulp

effluent from Northern Pulp. The effluent entering Boat Harbour meets PPER regulations, but Boat Harbour is far from a healthy, or even recovering, ecosystem today.

Northern Pulp's registration documents mock the Environmental Assessment process. Northern Pulp may as well have said: "We don't need to provide any hard information about the effluent, we don't need to do any studies, decades old data from other locations are good enough, we don't need to seriously consider the harm this project might do, and there is no need for the public to have the required information and scrutinize it to point out potential risks. We dare Nova Scotia Environment not to approve our application."

The proponent has addressed the risks of this project with a lack of seriousness. The proponent has provided no proof that harm will not be done. The proponent has neglected to provide the most basic data and science, e.g. no effluent composition, no water analysis of the outfall location, no lobster larvae studies, no evidence to even show that the effluent will meet federal regulations or provincial standards.

The Minister cannot make a science-based decision to approve this project, as there is no science on which to base a decision. The proponent's past record of poor compliance with regulations and a proven inability to identify leaks in a timely manner, despite being required in their Industrial Approval to have a system in place that that would insure timely detection of leaks, adds significantly to the risk of this proposed project.

I believe the Minister has grounds to reject this proposal on the basis that it has a likelihood of adverse effects or significant environmental effects, and I urge you do so. If the minister approves this project now, she will be setting a very dangerous precedent and encouraging other proponents to follow a similar path, which is inconsistent with the Environment Act.

If the Minister chooses not to reject this project, at the very least she must not accept Northern Pulp's proposal to provide future information to NSE behind closed doors, away from public examination and input. The minister must require a process which allows for full public examination and input into the many issues for which data has not been provided. That would require the Minister to order a full environmental assessment report.

Sincerely,

From: noreply@petition.web.net
To: [Environment Assessment Web Account](#)
Subject: In support of Northern Pulp's EA application
Date: March 9, 2019 11:47:18 PM

I am writing in support of the Environmental Assessment application submitted by Northern Pulp for its new treatment facility.

A lot has been said about Northern Pulp and its impact on the local community. I stand in agreement with many, including Unifor, that Boat Harbour must close and be cleaned up to respect Pictou Landing First Nations people and their land. I also know there are many positives about having 300 good-paying jobs in Pictou, supporting thousands more across Nova Scotia, particularly in rural communities.

The Nova Scotia Environment Act is an essential piece of legislation designed to protect our shared environment and guide our economic development. The Act rightly spells out its purpose through a set of principles for sustainable development that should guide its application, including:

-----> The linkage between economic and environmental issues, recognizing that long-term economic prosperity depends upon sound environmental management and that effective environmental protection depends on a strong economy.

In this situation, science should determine the best path forward. Nova Scotia, along with the rest of Canada, has among the highest global standards for environmental stewardship in the forestry sector.

The job of government and every person we elect to represent us in government is to find the best way forward when there are many competing and sometimes opposing interests. Communities across Canada manage to find a fair balance where good mill jobs coexist with a prosperous fishing industry and thriving communities.

We can and must find this balance for Pictou. There is a lot at stake: jobs, the environment, and respect for First Nations. We can and must find a solution that supports all three.

Thank you.

Signed by:

@shaw.ca)

From:
To: [Environment Assessment Web Account](#)
Subject: assessment re: Northern Pulp
Date: March 10, 2019 12:00:30 AM

March 8, 2019

The Hon. Margaret Miller
Minister of Environment
NS Environment
Box 442
Halifax, NS B3J 2P8

Minister Miller,

To me this Review is about the environment and the environment only My presentation is based on quotations from studies, positions papers and press releases from Canadian government Institutions. It is not about what I think. Or jobs. It's about the reality that the world we are living in today is changing rapidly due many sources of pollution.

The first crisis is the DE oxygenation of the Gulf or St. Lawrence (Northumberland Strait) water. a "In the Gulf of St. Lawrence, Oxygen in the lower depths has dropped by 55 per cent since 1930. We feel this issue has to be looked at and deserves more attention," said Denis Gilbert, one of the 22 co-authors and a Scientist with the Department Fisheries and Oceans. The Gulf of St. Lawrence is rapidly losing Oxygen,faster than almost any other marine ecosystem.

Acidification, mostly caused caused by burning fossil fuels is corroding and preventing formation of shells. The increased acidity will lower the saturation state of the waters with respect to calcite and aragonite and likely affect the ecology of carbonate-secreting organising such as coccolithophores, foraminifera, pteropods, mollusks, crustaceans,echinoderms, gastropods and corals.

The Canadian Journal of Fisheries and Aquatic Sciences stated" Their is a high probability that Atlantic Cod will be Extinct in the Southern Gulf of St. Lawrence by mid century, even with no commercial fishing". Other finfish such as turbot, wolffish and snow crab are listed along with other less known species.

"It started off as a bit of a dip, but then it got more profound" says Pierre Pepin, a senior researcher with the Department of Fisheries and Oceans in St. John's Newfoundland. "we're looking at values that are 50 per cent of what we saw five years ago. that's a substantial

decline". "The tiny organisms live near the oceans surface and underpin the entire marine food web, feeding the smallest and largest of creatures that call the ocean home. Small but mighty, they are what makes life on Earth possible.

In the Canadian Journal of Fisheries and Aquatic Sciences an article "Linking Zooplankton assemblages with oceanographic zones in an Atlantic coastal ecosystem" states that "Shallow (5- 35 metres water) coastal waters, with their proximity to human populations, are likely to experience greater changes to ecosystem structure and functions from climate change and human impacts than offshore waters. Concerns of declining fisheries landings and deteriorating habitat quality in Northumberland Strait led to an assessment by Fisheries and Oceans Canada."

The Gulf of St. Lawrence is dyeing. We must do everything we can to help this ecosystem survive. We can not dump 90 million litres de oxygenated pollution daily into this body or water and expect it to survive. we can not continue on the same path.

There is not enough money in Canada to bring it back.
If WE stand by and let the Gulf of St. Lawrence die

Sincerely,

From:
To: [Environment Assessment Web Account](#)
Subject: MY EA Submission for Northern Pulps Replacement Effluent Treatment Facility Project
Date: March 10, 2019 12:00:57 AM
Attachments: [EA Submission for Northern Pulps Replacement Effluent Treatment Facility Project.pdf](#)

To whom this may concern,

Please see my attached comments regarding the Northern Pulp's Replacement Effluent Treatment Facility Project proposal.

Kind regards,

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, NS, B3J 2P8

Dear Environmental Minister Margaret Miller,

I am writing in relation to Northern Pulp's Replacement Effluent Treatment Facility Project proposal.

My personal connection to the Northumberland Strait comes from being born and raised in New Glasgow, NS. After high school, I left to pursue higher education and upon completing my degree in Leadership and International Development worked in the development field in Zambia and Guyana.

I returned to Pictou County and it was upon my arrival that I learned of Northern Pulp's plan to pipe treated effluent into the Northumberland Strait—water that I grew up on. I have treasured memories of traveling to Prince Edward Island via the Northumberland Strait, and of time spent camping at Caribou-Munroe's Island Provincial Park. Returning as an adult this past summer I continued to take advantage of swimming in the Strait and walking its shoreline. Having grown up seeing the environmental impact of Northern Pulp on Boat Harbour and smelling and breathing the air emissions from its facility I felt it was important to review the company's Replacement Effluent Treatment Facility proposal as I'm concerned of its potential environmental impact.

Some of my concerns about the proposal and process include the following:

- 1. The length and complexity of Northern Pulp's Replacement Effluent Treatment Facility Project proposal.** The 1600-page document and technical language used undoubtedly make it difficult for the average citizen to read and to be critical of the proposal. This will likely result in excluding much of the population that could be impacted by this project. Additionally, a 30-day period limits the number of people who are able to fully review and comment on the document.
- 2. Potential risks to human health.** In section 9.0, page 489 of the proposal: Human Health Evaluation, Northern Pulp reports that "At this time, effluent chemistry characteristics (including the specific substances present in treated effluent and their anticipated concentrations) will not be known with certainty until the project is operational." It concerns me that this project could be approved without fulling understanding the potential health impact. If further investigation is not done on potential human health risks waiting until the project is operational may be too late.
- 3. Northern Pulp's claim of "No Significant Residual Environmental Effect".** In its Executive Summary, The company claims that out of 18 "Valued Environmental Components" none are considered to have a Significant Residual Environmental Effects. To me, this sounds massively optimistic and my question is what if the company is wrong? Based off my second concern

around health implications the company already admits that it doesn't actually know some of the potential impacts of this new facility.

Based off these concerns I sincerely hope you will consider rejecting the proposed Northern Pulp Replacement Effluent Treatment Facility Project. If you don't feel you can do this with the evidence before you, please call for a full Environmental Assessment report on this proposal.

Sincerely,

From: @gmail.com
To: [Environment Assessment Web Account](#)
Subject: Proposed Project Comments
Date: March 10, 2019 12:01:28 AM

Project: replacement_effluent_treatment_facility_project Comments: The issues with the Environmental Assessment start even before the Table of Contents. In the cover letter, Dillon Consulting mentions that they are submitting the document in accordance with requirements for a Class 1 project. Looking at the NS Environment website about Environmental Assessments <https://novascotia.ca/nse/ea/faqs.asp>, Pulp mill is listed explicitly as a Class 2 project. Additionally, this project also contains waste incineration plans for waste from the effluent treatment, which also qualifies for a Class 2 Assessment. Performing only a Class 1 assessment is a failure to follow the standards set out by Nova Scotia Environment. From here, the issues continue. Section 2.3 acknowledges that a full biological field assessments were not conducted to accelerate the process and to limit the period during which the mill would sit idle without a treatment facility. It then clarifies that the environmental effects have been defined based on existing available information from literature and other desktop information sources and that field data collection to complete the application will be conducted in Spring and Summer of 2019. By starting construction before the assessment has been completed, this assessment is assuming the outcome is a foregone conclusion - the project will have no impact on the environment. This is confirmed by the summary page. Unfortunately, due to the brief comment period allowed, I cannot perform an in-depth review of the entire 700 page assessment. I grew up in Pictou, and feel strongly that this project should not proceed. On a side note, I was living in a small town in Japan for the last 3 years. Several times I saw products available for purchase that were from Atlantic Canada - Lobster and Oysters. Never once have I seen a paper product proudly proclaiming provincial provenance - whether at home or abroad. There is no pride, no publicity, and no future for Nova Scotia in the paper industry. Name: Email: @gmail.com Address:

Privacy-Statement: agree x: 46 y: 22

Northern Pulp Nova Scotia
Replacement Effluent Treatment Facility



I am a Commercial Fisherman out of Caribou Wharf
I have fished out of Caribou for 32 years
I am presently fishing lobster, herring, and rock crab

I am asking the Nova Scotia Environment Minister to reject NPNS Replacement Effluent Treatment Facility, or in the very least, do a full environment assessment report on NPNS Replacement Effluent Treatment Facility for all the following reasons mentioned below.

Northern Pulp is asking the fisherman to believe in the science. I could not agree more.

Page 489 9.1
Human Health Evaluation

NPNS states, "At this time, effluent chemistry characteristic (including the specific substances present in treated effluent and their anticipated concentration) will not be known with certainty until the project is operational."

I believe that their Replacement Effluent Treatment Facility will harm the ecosystem of the Northumberland Strait.

- Which will be harm full to the fishing industry.
- Will affect the Tourist industry.
- This Environmental Assessment Registration Document is incomplete and shows misleading information.

How it will affect the fishery

NPNS is anticipating the effluent to meet compliance with federal PPER into Northumberland Strait. Page 120 E.

I bring your attention to Table 5.6-1 of page 120.
Total Suspended Solids, unit mg/L, value 48.

THIS IS THE MOST IMPORTANT NUMBER OF THE ENTIRE DOCUMENT

And a quote from Stantec .

"Pg 345: From Stantec Preliminary RWS, May19 2017: "...Density of the effluent for modeling purposes was assumed to be 996.32 kg/m³. This density was estimated based on an assumed average effluent temperature of 37C and total dissolved solids (TDS) of 4 g/L (KSH, per comm 2017).

NPNS told us at the public meeting in Dec 2017 that this new system would release 5 to 20 % of the solid matter (TSS) into the Northumberland Strait, which would be estimated at 2000 pounds per day. As well, this toxic solid (TSS) would just go away.

The Fisherman Association has had conversation with leaders in this field and feel that 20 to 40 % is more of an obtainable number.

I did the math based on peak flow rate 85,000,000 L per day. I have 4080 kg per day or 8994.86 pounds per day. If my math is right, THAT'S A LOT OF TOXIC SOLIDS. See attachment.

Boat Harbour is approximately 360 acres. It takes between 30 and 45 days for the effluent to go through the number of stages before it reaches the Northumberland Strait. Where it enters the Strait, it is a very small waterway, with very little tide. (I would guess it is 200 feet across).

I believe that Boat Harbour is doing its job and that there is very little to no toxic solids (TSS) entering the Strait. NPNS new RETF is better than what is going into Boat Harbour, but it is NOT BETTER than what is coming out of Boat Harbour.

I believe the cost to clean up Boat Harbour is mainly because the toxic solids (TSS) that is left behind.

The Boat Harbour clean up is now estimated to be 217 million dollars to clean up the contaminated sediment at the bottom of the Boat Harbour lagoon.

NPNS explains on " Page 67 and 68 Table 4.2-4 " why it cannot go into Pictou Harbour and the Middle River.

NPNS is saying that Pictou Harbour will become another Boat Harbour because it has limited mixing.

NPNS says it will have the same affect on the Middle River, as well potentially effect the maintenance of the equipment at the Middle River Pumping Station and inside the mill. (Similar style impacts as described in regarding the use of a closed loop system above).

I am guessing that Pictou Harbour is 20 times bigger than Boat Harbour.

In these two statements, NPNS is stating that it will create another Boat Harbour effect on Pictou Harbour, and after it goes through a water treatment plant at the Middle River Pumping Station, it is still going to cause damage to their system. Accumulation of chlorides and potassium are especially corrosive for the mill's boilers and often to lead to scale build-up.

How is this a better plan?

How is this not going to have a negative affect in the Northumberland Strait?

Under a freedom of information act, our lawyer has found some very damaging information.

-NPNS technical manger said in an email in November 2017 that the effluent going into the Strait would be worse in the new outfall location than what is coming out of Boat Harbour now. Boat Harbour has a polishing affect now that the new one is missing.

-NPNS does not know what is in the effluent when it comes out of the new outfall location area.

- It was recommend to NPNS that a lobster larvae study be done.

Appendix 14 page 3

Lobster Larvae Study

NPNS/Dillon unable to respond to concern at this time; will investigate further.

Where the outfall is entering the Strait, is in a narrow channel. I believe that is 80 feet deep. You only have to go 100 yards north and you are in 40 feet of water, prime lobster bottom. You go 100 yards south; you are in 40 feet of water, where the Caribou Harbour channel begins.

Appendix E1 Page 18 Figure 3.1

They say the tide is going NW 54% of time and SE 31% of time. What is it doing the other 14% of time. Are we supposed to draw our own conclusion?

This is going to create a dead zone due to the following reasons.

-The increase in water temperature (25 c winter and 37c summer). Now high for the summer might be 20c, an adult human would find 37c to be uncomfortable. How is anything at a young critical stage going to survive?

-The amount of effluent and toxic solids (TSS)

-What is in the effluent, which is unknown?

I believe that the toxic matter (TSS) is going to have an affect on the existing fisheries.

My understanding is that effluent for pulp mills slow down the growth and reproduction system in a female lobster. But they say that they are still good to eat? Where is this toxic solid (TSS) going to settle? West as far as Toney River? East as far as Lismore? North as far as PEI?

Human Health Evaluation Page 540 shows a huge affected area.

I believe the out fall site (dead zone) will affect the future fisheries. Lobster larvae going through site will not survive.

How can we have sustainable fisheries?

Fisheries and Agriculture confirmed that 70 per cent of pulp and paper mills which meet (Pulp and Paper Effluent Regulation) cause harm to fish and fish habitat, and that Northern Pulp is one of the mills which are presently causing harm to fish habitat.

A study that was published in 2005 showed that outside Pictou Harbour, 30 % of mussels at a site 500 metres from Boat Harbour outfall had leukemia. At a site one kilometer from the same outfall, 23 % had leukemia.

In 2018, there was a shellfish closure where Boat Harbour enters the Strait. It ran 6 km east to Black Point. See attachment from Department of Fisheries.

How it will affect the Tourist Industry

I live across the road from the Munroes Island and Provincial Park entrance since 1985. Prior to that since 1969, I lived on Old Orchard Lane 200 meters from the waters edge, which is located between the Provincial Park and the Pictou Lodge. One individual that has a year round home and rents 30 yearly sites to seasonal trailers mostly owns this property. There is also four private owned cottages and one more year round house, all within 100 meters from the shoreline.

In the early 70s at that time the Pictou Lodge was closed, its front row of cabins was falling down its banks from erosion. This bank is roughly 75 feet high.

The fishing boats from Maritime Packers (which does not exist anymore) and the Caribou Ferry Wharf could take the Little Entrance, a channel that separated Munroe's Island from the Provincial Park beach, to the open water of the Strait. That has filled in 1979 due to a massive storm.

The province of Nova Scotia designated Munroes Island as a sanctuary around 2000, protecting birds, fish, and wild life. For more information, look under Caribou-Munroes Island Hiking Trails.

I have walked these beaches since 1969. In my 50 years, I have seen the affects that Mother Nature has on the area. The beach is one of best beaches in Pictou County, if not Nova Scotia. There is sand from Munroes Island to the point off Pictou Lodge. You can get strong winds from the north and the beach is covered in eelgrass and seaweed. This happens every fall.

The Provincial Park offers 95 campsites. It is often sold out in the summer months, and the beach is very well used by local people and out of town visitors. The Province of Nova Scotia has continually put money into the park doing upgrades. I see and hear the trucks in the offseason.

I think the Pictou Lodge speaks for its self as one of the nicest resorts in the Province of Nova Scotia.

When the park is closed in the offseason, every day I see cars parked at the entrance, a lot more on weekends, using the park and beach for walking, snow shoeing and skiing.

The outfall area is .9 km from Munroe's Island and roughly three km away from the Pictou Lodge. This effluent and toxic solids (TSS) is going to settle somewhere. With the tides and winds, how can the effluent and toxic solids not wind up in the eelgrass and seaweed, eventually landing on the beach from Munroe's Island to the Pictou Lodge? It will only be a matter of time before this area would not be safe for swimming and affecting the life of animals that exist on Munroe's Island.

Prior to Boat Harbour being build, the Pictou Harbour Light House beach was a fantastic place for swimming. It is very close to where Boat Harbour enters the Strait. Now it is not safe for swimming because of the effluent from Boat Harbour.

Environmental Assessment Registration Document is incomplete and shows misleading information

- NPNS is referring a lot of its information based on its original site off Pictou Harbour.
- NPNS was told by fisherman in their public meeting in Dec of 2017 that the site would not pass because the water was too shallow and the ice would cause damage. It cost NPNS six million dollars to find out this same information. We were right.
- If survey work was done on NPNS second choice, what makes you think it would pass when their first choice failed?
- NPNS has no public meeting on their new site. NPNS says they don't have enough time.
- NPNS has not done any surveying, videotaping, test holes and core samples off this new site.
- I do not see in these documents (E1) 17 beta-estradiol (E2) estriol (E3) 17 alpha-ethinylestradiol receiving water studies.
- If the tide rises 54 % of the time at the outfall, where is Caribou Harbour getting its water? When the tide rises it goes into harbours.
- NPNS has no information on the long-term affect of Caribou Harbour.
- NPNS has provided insignificant data through out these documents.
- NPNS has not done a lobster larvae study.
- There are new pulp mill regulations that come out in 2020. How does NPNS know they can meet them if we don't know what they are?
- NPNS environment impact may not be known until the future.

Section 8.12.2.5 pages 368 and 369
Showing maps of rock crab and Lobster.

I started fishing rock in 1990.

Personally, I am fishing rock in the channel where the diffuser is to be located. Going east as far as 5 miles east of Pictou Island, on the south side of Pictou Island fishing as close as you can get where the sand is, to three miles off Big Island. Meeting boats from Pictou Landing First Nation and Lismore, as well as other boats from Caribou.

See map attachment. I colored in red where I fish, and in green where I know other NS fisherman are fishing. I know boats from PEI fish out of Wood Island are fishing somewhere; I have to think that they are fishing where NS boats are not. I made a blue circle where I think they fish. Wherever there is soft bottom, someone is fishing rock crab.

I started fishing Lobsters in 1987.

When you buy a lobster license in this area of NS, you have to fish where the seller had fished in the past.

I am fishing lobster at the edge of the channel where the new out fall is proposed. Staying east of the ferry run, going north halfway to PEI where I meet up with the PEI boats. I know for a fact, in June, that boats from Caribou Harbour, Pictou Landing First Nation, Sinclair's Wharf and Lismore are fishing the soft bottom between NS shoreline to Pictou Island and heading east as far as they are allowed.

A boat from Lismore was charged this last spring for fishing over the line. IT'S TEN MILES OUT. Lobster fishing in our area is very good right now. Lobster catches are by far the highest in my 32 years of fishing. They are everywhere.

See map attachment. I colored in red where I am fishing. Colored in green is where I know other NS lobster boats are fishing. Also, circled in blue, is where I think PEI boats are fishing.

Page 495 and 496 9.2.1
Human Health Evaluation

" The specific pathways, and routes that were identified as being relevant for the project are as follows " It goes on to mention that PLFN has approximately 100 people in the commercial fishing industry.

Why is Caribou Harbour not listed? Caribou Harbour has around 70 commercial fishing boats listed as their homeport. Most boats have three people on them (210 people). There is also a few boats at Pictou Island Wharf and a few more at Sinclair's Wharf. During lobster season alone, there are three lobster buyers. One of them is North Nova Seafood's, which operates a fish plant in Caribou Harbour. In 2019, North Nova Seafood sent out around 500 T4 slips. Caribou Ferry Wharf is the central location of the commercial herring fishery. I believe in 2018, there were four herring buyers with boats from Pugwash and Cape Breton and everywhere in-between.

NPNS is so inaccurate in these maps and statements. I not sure if they are completely trying to mislead the public on how little fishing is in this area, or is NPNS using out dated information. In the meeting NPNS had with the fisherman in Dec 2017, they were not aware of any fishing done at the original site. The fisherman told them at that meeting their information is incorrect. NPNS was told at a stakeholder's meeting that their maps were incorrect. A phone call to the Department Of Fisheries in Pictou would verify how much fishing is done in this area.

If NPNS is so inaccurate and misleading on something so simple to find out the proper information, what does it say about finding out real science on the affect that the effluent and toxic solids (TSS) in going to have in the Northumberland Strait?

How can we trust NPNS science that is stated in this document, if they do not know what is in the effluent when it come out of the pipe?

At the Dec 2017 public meeting NPNS had with the fisherman, a fishermen's group representative from New Brunswick stated that Stantec did the work when the Confederation Bridge was built. The Stantec study showed building the bridge would not affect the lobster fisheries. The representative stated that they saw negative affect on the fisheries right away and took years for the fisheries to rebound.

Appendix E3 Page 4

Stantec, Sign-off sheet

- Reflects Stantec's professional judgment.
- Do not take into account any subsequent changes.
- Did not verify information supplied by others.
- Not responsible for cost or damages of any kind.

Appendix C Page 19

KSH Disclaimer

- Should not be viewed as definitive.
- Does not guarantee such accuracy of such estimates.
- Bear no responsibility.

NPNS used this words a lot –Best industry practice

- Minimize potential impact
- Anticipate
- Not recommended
- Not significant adverse

I have one phase for the Minister, PERCAUTIONARY PRINCIPAL.

It comes down to the Province of Nova Scotia taking all the liability responsibility when this Effluent Replacement Treatment Facility fails.

Page 441 8.14.4.2

Commercial Fisheries and Aquaculture Compensation

First paragraph states, "The potential of the project to impact commercial fisheries and aquaculture could occur from effects on marine population, damage to vessels or gear, or interruption to loss to access to ground."

During the NPNS public meeting with the fisherman in Dec 2017, it was directly asked if there was going to be a bumper zone put around the out fall, and how big of an area would be closed for shellfish? We are still waiting for the answer.

Since I fish where this outfall is located, my income is going to be directly affected, and I will be one of the first fishermen in line to sue.

I am asking the Environment Minister of Nova Scotia to reject NPNS Replacement Treatment Effluent Facility, or the very least, order a full environment assessment report on NPNS Replacement Treatment Effluent Replacement Facility.

March, 04, 2019

$$48 \frac{\text{mg}}{\text{L}}$$

$$85,000 \text{ m}^3 \text{ per day}$$

$$1 \text{ m}^3 = 1000 \text{ L}$$

$$85,000 \frac{\text{m}^3}{\text{day}} \times \frac{1000 \text{ L}}{1 \text{ m}^3} = 85,000,000 \text{ L per day}$$

$$48 \frac{\text{mg}}{\text{L}} \times 85,000,000 \frac{\text{L}}{\text{day}} = 4,080,000,000 \frac{\text{mg}}{\text{day}}$$

$$1 \text{ mg} = 1 \times 10^{-6} \text{ kg}$$

$$4,080,000,000 \frac{\text{mg}}{\text{day}} \times \frac{1 \times 10^{-6} \text{ kg}}{1 \text{ mg}} = 4080 \text{ kg/day}$$

$$1 \text{ kg} = 2.20462 \text{ pounds}$$

$$4080 \frac{\text{kg}}{\text{day}} \times 2.20462 \frac{\text{pounds}}{\text{kg}} = 8994.86 \text{ pounds/day}$$

$$4080 \frac{\text{kg}}{\text{day}}$$

or

$$8994.86 \frac{\text{pounds}}{\text{day}}$$





Check the map and Prohibition Orders before harvesting!

For fishing seasons, size and quota limits refer to the Regulations and Variation Orders under the Fisheries Act. Contact your local DFO office for details.

Anyone harvesting bivalve shellfish, i.e. shellfish with two shells, including all clam species, oysters, cockles, mussels and scallops, is responsible for ensuring that an area is designated as safe for harvesting. Eating contaminated shellfish can cause serious illness or be fatal.

Shellfish should not be harvested in unmonitored areas or within 125 metres (410 feet) of a wharf, a marina, an aquaculture operation or a floating house. **Unless clearly stated otherwise, all closures extend to the coastline.**

Legend

-  Green areas are approved for harvesting of all species of bivalve molluscs
-  Red areas are prohibited for all species of bivalve molluscs
-  Red hatching are areas where harvesting of only some species of bivalve molluscs is prohibited
-  Yellow areas are under variation orders issued for conservation, safety or contamination

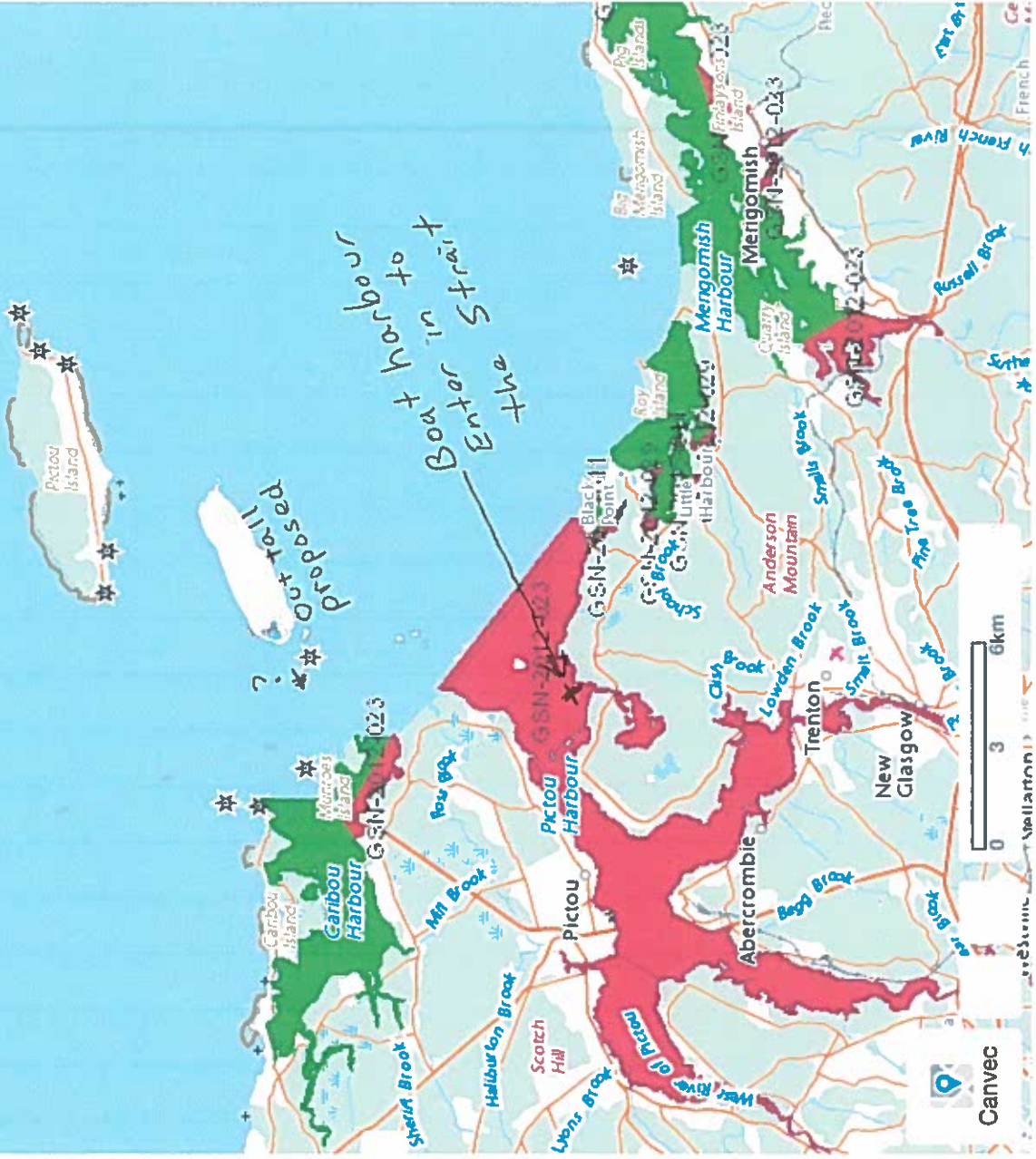
Zoom in and click on an area for more information

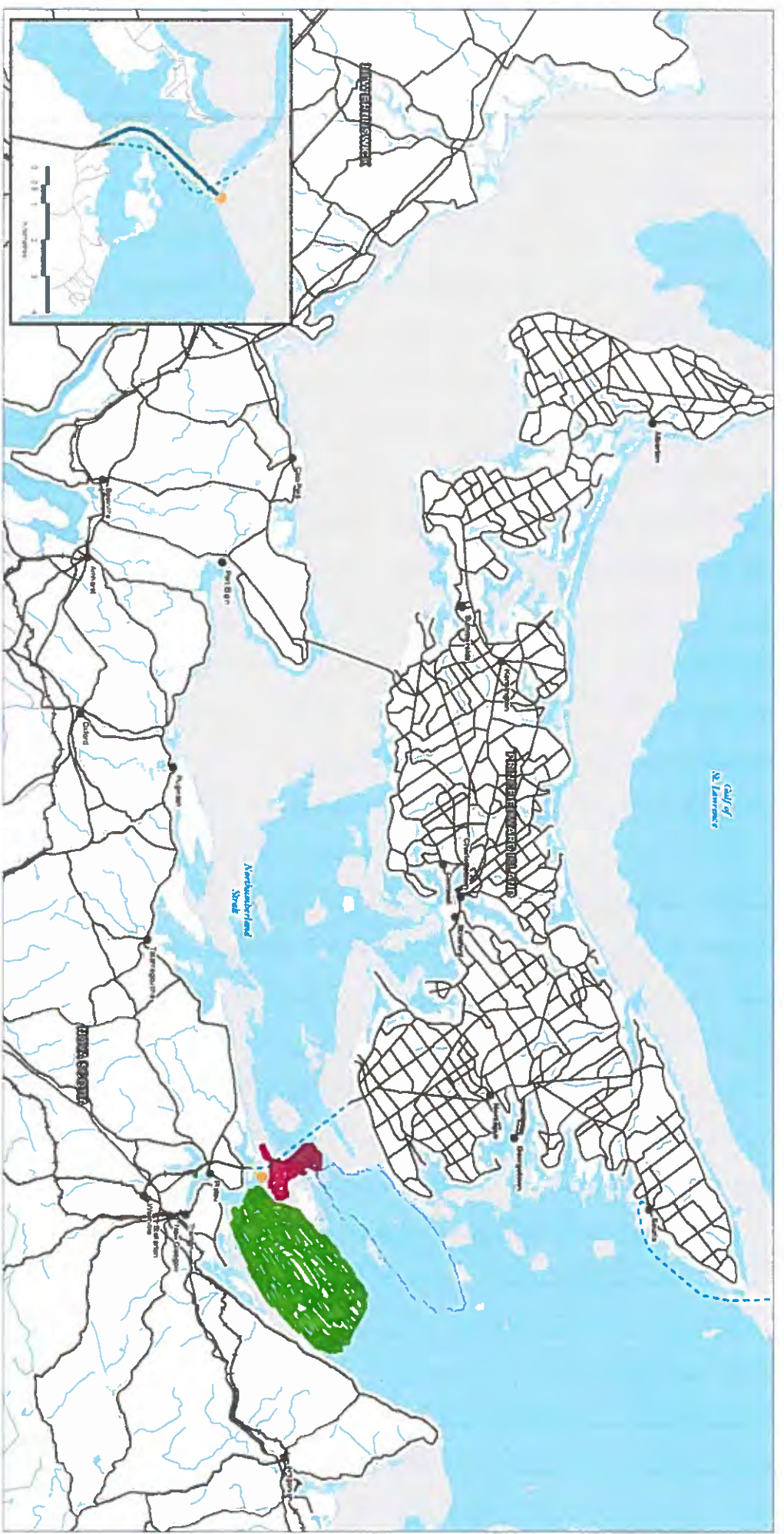
[Shellfish harvesting and safety.](#)

I want to...



Tools





Northern Pulp Nova Scotia Corporation
 Replacement Effluent Treatment Facility
 Environmental Assessment
 Lobster Fishing and Distribution
 in the Northumberland Strait
 Figure 8-12-4

Legend

- Outlet Discharge Location
- Lobster Distribution
- Lobster Fishing Resources
- Marine Land Assessment Area
- Vertical Project Footprint Area

DATE COMPLETED: 2011
 DATE PROJECT CLOSED: 11/02/2011



This Project Footprint to be determined following
 completion of detailed design
 Project: 11-0481
 Scale: 1:25,000

Red - where I fish Lobster
 Green - I know that other
 Lobster Fisherman
 or fishing

Blue circle where I think
 PEI Boats are fishing



March 6, 2019

Dear Ms. Miller,

My name is _____, and I live in Pictou, Nova Scotia with my husband. We have raised our daughter in Pictou and she is now a university student. I am a graduate of The University of Toronto. I am not a scientist, but have many years of lived experience with issues of environment, nature and health. As a young girl, I kept tropical fish, and I learned much about the fragility of marine life through my experiences.

I am writing to you with my concerns regarding The Replacement Effluent Treatment Facility Project, submitted by Northern Pulp.

I have many grave concerns about the possibility that NP would be allowed to go ahead with this project.

My first concern, which is a general one, is that the size of this document alone would warrant much more scrutiny than a Class 1 assessment would give it. The contents of this document are extremely complex and would affect the environment around Pictou, the environment in Caribou, and the waters of the Northumberland Strait, which assuredly impacts all of Atlantic Canada's provinces. It is too long to read through and say that it is a simple project in any way.

My second concern: Under Key Federal Regulations on page 20, (Section 3.2) NP claims that no Federal EA triggers have been determined. I dispute the classification that this treatment facility is an extension of the old one. It is completely new in it's many plans. The building of a pipe, running it to the Northumberland Strait, is not at all an extension of Boat Harbour. (However, I suppose it is the same in the fact that they plan to throw their trash into another body of water, rather than build a container to hold it.) I look at Boat Harbour and it's destruction and know that destruction will only increase if a direct pipe goes into the Northumberland Strait. If it is indeed the "same" plan, then an EA Assessment would seem vital to maintain the health of the ocean they intend to use to receive their garbage/effluent.

My Third concern: On page 50, (section 5.3.1.1) NP claims that all construction will take place on their right of way boundaries. However, the proposed pipe would run alongside the Watershed for the town of Pictou. If only the effluent running through the pipe understands those boundaries too! Given the record of NP's pipe failures and spillage, and given the fact that monitoring is minimally carried out at best, disaster would be imminent for the drinking water for the town of Pictou. There is nothing more necessary

2)

for human life than clean water. Nothing. Pipes break. And pipes buried under the ground don't reveal the spillage until the damage has already occurred.

in addition to this, NP's massive use of fresh water is an obscene waste. They have been draining the water tables in Pictou county for decades, rather than build a closed loop system. It is 2019. We have knowledge that our lifegiving resources are being depleted.

My Fourth Concern: On page 45, (Section 5.2.2.8 paragraph 4) they state that the sludge from the effluent will be burned in their existing power boiler. My God! The sludge will go into the air and everyone will breath it! And the power boiler is a malfunctioning piece of aged machinery. They state that this sludge "partially displaces the use of fossil fuel." They won't use a closed loop to save on water consumption, but make a feeble attempt in this statement to make it seem like they are conservation minded by reducing their use of fossil fuel. And all the while, depending on an aged and malfunctioning power boiler that never meets the low standards that government has outlined for it! This sludge will contain many toxins. I site the visual containment at Boat Harbour. Boat Harbour is now so polluted that careful cleanup costing millions (or billions) is necessary. There was a reason for containment, and putting that garbage into the air distributes it very quickly into people's bodies. Wow.

My Fifth Concern: In this NP document there are many pages of the description of the work to be done to lay the pipe. It is vast and complicated, and also speaks of this project not being an extension of the present containment at Boat Harbour. (And thus ineligible for a quick assessment.) Some of these descriptions sound like clearcutting around our Pictou town area. On page 52,(Section 5.3.1.4) they describe "grubbing" which is removing stumps, vegetation and top soil. They write of conserving topsoil. Thousands of acres of clearcutting all across the province and they have never once "conserved topsoil." On page 51 (Section 5.3.1.3 Paragraph 4) they refer to paying attention to bird migrations and nesting. Having seen and read of their clearcutting in Nova Scotia, I know they don't pay any attention to these issues. I can only conclude from these statements that they are lying.

My Sixth concern: on Page 79 (Section 5.3.2.4) they state that this pipeline will last for 50 to 100 years. Imagine the state of the Northumberland Strait after all that time. I've seen Boat Harbour. There is not enough "dilution" in any body of fresh natural water to dilute the massive amount of heated foreign substance that will accumulate. Add to that the state of our forests. They are disappearing at an alarming rate. In 50 to 100 years what trees will we have? This is all unacceptable, unsustainable. Do you have children and grandchildren? Don't you care that after we are gone we will leave our children and grandchildren a blighted poisoned world? Because allowing this is happen will create a diminished world. An ugly unliveable world.

Then they go onto say on the same page the amount of heated effluent to be discharged into the Strait on a daily basis. The numbers are astounding, mind boggling. 62,000 m3 to 85000 m3 per day! 1m3 equals 1000 litres! There is an insanity to this. Million and millions of litres created with our fresh water from our water

3)

tables and thrown,heated, into the fragile and temperature sensitive saline environment of our Strait, from which we get our food. So, food and water destroyed wantonly in this process. Unimaginable, but if allowed, horrifying. Destruction of the environment on a massive scale.

Top of page 84: (Section 5.6.1 E) "The effluent is expected to meet requirements.... " But even if you put heated fresh water with NO effluent in it into the Strait in those quantities, we would have a vast warming of that ocean. We now have enough evidence now that the temperature of oceans are rising, and changing life/climate on this planet for the worse. If this effluent actually meets any requirements, then the requirements must be changed.

And I finish my letter to you with this: On page 88, (Section 5.7.1) NP states they are "committed to developing this project in an environmentally sustainable manner.." I have never seen them operate in an environmentally sustainable manner. I live in the town of Pictou and have experienced daily what you, the government, have let them get away with. If they were intending to operate environmentally they would build a new plant, with new stacks and power boiler, a closed loop system and container for their effluent. Boat Harbour would have ceased to be an issue and they would have cleaned it up themselves instead of letting the taxpayers of Nova Scotia pay for that.

This document is set up to read well, but it contains horrors. I ask you, I implore you to send this proposal off to the CEAA. Or stop this nonsense right here and now and shutter this wretched company. Jobs to replace the mill can be found, with determination and imagination. But life, water, food, and natural resources can never be reclaimed if this plan is allowed to go forward. Never.

Sincerely,

@gmail.com

The Northern Pulp and Paper Mill has been poisoning the environment surrounding Abercrombie Point from the day it started production.

The pollutants released into the atmosphere have been dispersed over Eastern Canada and beyond.

It has interacted with similar- blowing across North America and within the atmospheric chemistry creating products that are detrimental to the ecosystem of all air breathing lifeforms and subsequently ending up in the water systems for the future to absorb.

A large part of what is produced in this mill is now sitting in landfills all over the continent.

The destruction, disruption of the ecosystems and diversity of natural wildlife in the woodlands that are being mowed down to feed this operation and the loss of its maximum global warming carbon dioxide absorbing /recycling capability is short sighted.

The fossil fuels burnt in the power generation plant to provide the electricity to run this operation create more pollution and carbon dioxide emissions as well as increased electromagnetic field emissions ...as do the logging trucks and logging operations and not to downplay the dangers imposed by their presence on the rural highways.

From the beginning residents living around this plant for miles have suffered from the stink and health effects of breathing this mix of slow poisons.

Those near the Boat Harbour dump have been unknowingly infected much more.

A common rule of law states that a person has reasonable right of enjoyment of their property.

This plant is in violation of that right.

The concept of pumping this scientifically treated effluent into the Northumberland Straight-out of sight and out of mind of the locals is doomsday for the marine ecosystems there and beyond.

The ocean is still relatively natural and useable as a food source in comparison to our land based sources which are increasingly being chemically and genetically enhanced and disturbingly modified by human ingenuity.

The ocean has provided long term and until recently -sustainable- income to many.

How does the pollution created by the same number of jobs in the fishing industry compare to that of this plant?

...and which occupation has more value to the community other than money?

The concept of tax dollars being used/donated to create some jobs for a few decades??? with no concerns for the long term effects on the environment and its ability to feed all of life's myriad of interdependent organisms is in violation of a governments legal-duty of care- and negligent.

The question arises -if it is now pure enough for the Straight why are they going to the trouble to pump this thru a pipe out there? Why not just dump it into Pictou harbour. Why not put it in swimming pools /lagoons on the site and properties of those making money from this and require them to swim, bath, wash their cloths and water their gardens, for a period of time to show all how pure they believe this to be. Why couldn't it be shipped in tankers to the yards, neighbourhood of its owners?

...and what else might find its way out there under the cover of darkness?

...and how does this chemically mix with all the other chemicals, drugs, plastics, etc. now working their way downhill towards the ocean from our septic systems and landfills ?

It's repercussions will become evident in time and beyond repair.

A small percentage of the community have benefitted financially from the plant and the health care and drug store businesses. are assured to prosper into the future.

The wealth of few have affected the health of all.

The original minds that put this there have all grabbed their spoils and slithered away with no accountability for their short sighted efforts.

This plant is old technology wise and has been paying for itself and may still be viable for a few years more?? but it's time is near.

It has left its legacy for the future to deal with.

The minds and backgrounds of previous governments have donated tax dollars to this business in support of the wealth and will spend more in health care for the elderly because of the health effects from its pollution.

The expression -know when to fold 'em -has merit in this case

The loss of the jobs for those responsible for this can be viewed as the best thing that has

happened to the community since this plant began. They can be viewed as accomplices to a crime.

It would be but a minor blink to the local economy and would open up development opportunities for the town of Pictou that are now being repressed because of its annoying unpredictable stink.

Employment opportunities come and go thruout any community thruout any year. Some empyees have job skills that will be of value.

Tax dollars can be invested in others to re-educate, retrain, relocate and temporarily support their living needs.

The community can be called upon to help them in their time of duress.

The community as a whole is better off in the long term to not have all its eggs in one basket owned and controlled by some come from aways!

thank you

@ns.sympatico.ca



March 4, 2019

Environmental Assessment Branch
Nova Scotia Environment
P.O. Box 442
Halifax, NS
B3J 2P8



Dear Sir/Madam

Re: Northern Pulp Proposed Replacement Effluent Treatment Facility Project

To introduce ourselves, we are retired, in our early 70's & reside on Caribou Island, directly facing Caribou Harbour. We love our view of the harbour, the water, beaches & air quality except when there is a southwest wind. That is when we get the putrid toxic plume from the pulp mill which was supposed to have been remediated years ago at great expense to the taxpayers of this Province. Nothing was ever done & probably never will be. Our lives & health have been directly impacted due to the mill's total disrespect & disregard for people in this community.

In all due respect, we vehemently reject the Project because of the likelihood that it will cause adverse effects & additional devastating environmental effects that cannot be mitigated.

At best, the proposed Project is a case study, based on just bits & pieces of unprovable data with the entire process lacking in credibility. There were never any public consultation meetings by Northern Pulp on the proposed project; in fact the only consultation made was on the wrong project; i.e.: Pictou Harbour.

The voluminous registration document is rife with unsubstantiated & very confusing data. As one example we refer you to the Table of Contents, Section 7.0, Sub-Sections 7.4 - Factors to be Considered & 7.41 - Scope of Factors to be Considered. By the consulting engineers own admission, their "Scope Sign-off Sheet" is at best based on unverified information supplied by others, hearsay, etc. for which they assume no responsibility. A Scope of Work should contain any milestones, reports, deliverables, time lines & note the biggest risks to the successful (Not Defensible) completion of this type project, just to name a few. In our view this alone defeats the Project!

Add to all this is the fact that Northern Pulp does not know just exactly what the effluent is comprised of. Yet they want to pump millions upon millions of this toxic sludge into our waters with no concerns for our health, the environment, tourism, wildlife, fish habitat and absolutely no appreciation for nature, just to name a few. Just exactly what would be the long term effects on Caribou Harbour? There is no long term data providing any insight and what data is provided is totally insufficient. Why should that be surprising considering the study is based on the Pictou Harbour route.

There are no provisions to protect our ecosystems & not even enough data to meet current regulations.

Very questionable & misleading information is contained in various parts of Appendix E3 - Preliminary Receiving Water Study. For example, please note Sec. 2.0 - Far Field Modelling, Sub. Section 2.1.2.5 - Currents. This information is old data and again based on Pictou Harbour, not Caribou Harbour. Also, please carefully note Sub. Section 4.2.2 - Ice Conditions, which states among other factors and it is emphasized that ice conditions in the Northumberland Strait are highly variable and the ice cover varies considerably from year to year.

The Caribou Harbour ecosystem is constantly evolving and will not survive the adverse effects should Northern Pulp's effluent be allowed to be dumped into the Strait! We do not feel any portion of the process has been fair to the community at large. We feel that Northern Pulp have failed the test and the undertaking should be rejected. At the very least, the Project should undergo a Class 2 EA.

Respectfully Submitted

From:
To: [Environment Assessment Web Account](#)
Subject: RE: Warning: send failed for one or more of recipients
Date: March 11, 2019 12:54:28 PM

There must be further assessment as so much is at stake for NS and PEI and NB. We do not know the ingredients. They will start burning contaminated sludge without a thorough study of emission concerns, the environment, the fisheries, sea life and tourism. All are at risk the strait can freeze so how will the warmth flow impact lobster spawning grounds. Much further studies need to be done. Thank you

----- Original message -----

From: Failed Delivery Notifier >
Date: 2019-03-08 16:24 (GMT-08:00)
To: [@shaw.ca](#)
Subject: Warning: send failed for one or more of recipients

Your mail (subject "Environmental assessment of effluent treatment facilit") sent on March 8, 2019 at 5:24 PM Mountain Standard Time could not be delivered to one or more recipients. For further assistance, please contact admin.

ea@novascctia.ca: Invalid Address

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