

Appendix I4

Stakeholder Meeting Minutes

**Meeting of Fishers of Northumberland Strait (Fishers) & Northern Pulp (NPNS)
Re: Proposed Effluent Treatment Facility Replacement (ETF)
December 21, 2017 – 2 PM – Holiday Inn Express, Stellarton**

In Attendance:

- 
- Northumberland Fishermen’s Association
 - Gulf Nova Scotia Fishermen’s Coalition
 - Gulf Nova Fleet Planning Board (Recorder)
 - Inverness South Fishermen’s Association
 - Maritime Fishermen’s Union
 - PEI Fishermen’s Association
 - PEI Fishermen’s Association (Southern Kings & Queens)
 - PEI Fishermen’s Association (Biologist)
 - Lismore
 - Northumberland Fishermen’s Association
 - Gulf Nova Scotia Bonafide Fishermen’s Association
 - MLA Pictou West
 - General Manager, Northern Pulp
 - Technical Manager, Northern Pulp
 - Nova Scotia Department of Transportation & Infrastructure (TIR)
 - Dillon Consulting Limited (Facilitator)
 - EA & Community Relations Coordinator, Northern Pulp (Recorder)

Meeting Facilitator:

Prior to start, a brief discussion was held regarding who should act as facilitator for the meeting. The Fishers had suggested that [REDACTED] (MLA) facilitate; [REDACTED] (Dillon) expressed interest in doing so. It was agreed that [REDACTED] would facilitate the meeting.

Introduction:

Facilitator opened by thanking [REDACTED] for arranging the meeting and invited all present to introduce themselves (noted above) and share expectations/desired outcome of the day’s discussions.

Expectations/Desired Outcomes (Composite):

- Better understanding of the proposed ETF project
- Attending with open mind, hoping for meaningful discussion so that both industries may find a positive path forward
- Clearer understanding of processes undertaken to support recommendation of ETF as proposed
- Better understanding of the proposed ETF project and willingness to work together to find a solution suitable for both industries
- Maintaining all jobs and keeping the environment pristine
- Wanting to find a different – a better – option than placing an effluent pipe into the Strait
- Develop an ongoing plan of how to move forward through to registration of the project, ensuring positive outcomes for both industries

Facilitator thanked everyone for sharing their expectations and their willingness to participate in the process. She stressed the importance of the day’s discussions as being instrumental in the continual building of the project website to ensure relevant information is available for stakeholders and general

public. In addition to information gathered at recent open houses, rounds of environmental effect monitoring, etc., NPNS/Dillon welcome the Fishing Industry's input as to what additional information it will need going forward.

Open Discussions:

- Receiving Water Study (RWS)
 - Fishers requested a copy of the full study.
 - Stantec is preparing a letter to address concerns previously raised (salinity, storm surges, etc.), which will be supplemental to the Report. Once complete, RWS and letter will be put on the project website.
 - Modelling
 - Fishers request dispersal rates for modelling.
 - NPNS suggested meeting be arranged with Stantec to review RWS, Fishers' modelers, Fishers and NPNS/Dillon so all may be present for discussions. It was further suggested that a small group of representatives attend to move things along quicker.

- Lobster Larvae Study
 - Concern expressed about the effect of 9 million litres of fresh water on lobster larvae.
 - A lobster larvae study was not included in the RWS. Fishers advised it is now too late to conduct a lobster larvae field study (anything now would be literature review only, not field study). Testing cannot be done until July, with results in August. It takes 2 years to conduct a valid study.
 - NPNS/Dillon unable to respond to concern at this time; will investigate further.

- Project Website
 - Fishers requested raw data from Environmental Effects Monitoring (EEM) appendices.
 - Agreed that both EEM appendices and Frequently Asked Questions (FAQ) would be posted to Project site.

- Closed-Loop System
 - Project as proposed does not have support of Fishers. They are open to discussing other options – ones that would eliminate the installation of a pipe in the Strait.
 - Facilitator advised that there's no science Dillon can produce that would make an NBSK (Northern Bleached Softwood Kraft) mill viable with closed loop technology
 - Science further questioned
 - If quality of treated effluent is suitable to be released into the Strait, how can it not be suitable for reuse inside the mill?
 - Also, it appears that the purpose of Oxygen Delignification (O2D) is to recover chemicals only.
 - Was a closed-loop system considered?
 - TIR confirmed that the purpose of the Design Study undertaken by KSH was to review and consider all possible options for replacement. NPNS/Dillon confirmed closed-loop system was considered but found not a viable option: 1) treated effluent contains chloride which, if reintroduced into the mill, corrodes equipment, and 2) today's market demands a bleached product. Mills that have closed-loop systems are designed differently and sell a completely different product. NPNS/Dillon will continue to research.

- Facilitator reminded that Dillon is still building science based on a plan to move forward. If the science doesn't prove that the proposed plan can proceed, it will be rejected.
- Effluent Pipe
 - Fishers stated that the project as proposed is going in the wrong direction and would not be supported by the Fishing Industry. Fishers advised NPNS/Dillon to stop all work as currently proposed. NP/Dillon were urged to start over again; then go back to the Fishers with a different option.
 - Fishers offered to assist in the design a new system – one that would support both industries. Cautioned that the system must:
 - Support survival of the Strait – its entire ecosystem, from anthropoids up. To do so requires extensive testing on actual samples, which cannot be fast-tracked.
 - Protect the livelihoods of 9,000 Fishers and families (35,000 boats); a \$3-4 billion industry in Atlantic Canada.
 - Suggestion was made that the Dillon's Marine Biologist meet with the Fishers Marine Biologist. Agreed by NPNS/Dillon.
- Provincial/Federal Government Involvement
 - Questions were raised about the involvement or briefing of both provincial and federal governments. The response was that TIR, as owner of the current ETF, has an interest in the EA and the design work of the replacement ETF. NSE is the independent regulator. Briefings of other government departments would be between NPNS & NSE.
 - Discussions then ensued re: science and possible impacts on right whales. Facilitator reiterated the building of science is ongoing, once again stressing the importance of participation in today's discussions.
- Change of Project Direction
 - Fishers spoke to its industry and how changes had made during times of reduction in quota and prices and asked that NPNS now consider reducing the quality of pulp produced.
 - PEC's vision of the future of the mill was then questioned. It was confirmed that PEC has a long-term vision for NPNS.
 - Fishers stated that, should PEC decide to produce a different product, they would support that decision and would lobby the government for funding for a closed-loop system.
- Protection of the Resource
 - In 2010 the Fishing Industry was involved in the Atlantic Lobster Sustainability Measures. Fishers made a lot of concessions to protect the Strait. It's the Fishers' responsibility to protect the entire resource, not only lobsters.
- Timing & Approval of EA
 - Fishers re-iterated that there isn't enough time to complete studies necessary to protect the industry. It is far too late for the Fishing Industry to become involved now to complete studies for application submission, in time for the 2020 ETF closure. They questioned where the Premier and Minister stand on such issues.
 - For the mill to exist, both industries need to find a way forward so that the EA process can received approval. Facilitator stressed hope that NPNS/Dillon can take all considerations discussed today and adjust accordingly.

- NPNS was asked what happens if the EA is not approved. If the EA is not approved, it will be the Province's decision as to what happens next. The Minister could request additional information or studies or reject outright.
- The question was posed as to why the Fishing Industry had not been consulted sooner. NPNS acknowledged that the timeline is tight, however, it is only now that enough information is available to be shared.

Next Steps

- The Facilitator thanked everyone for their active participation and advised that NPNS/Dillon now have to gather and share additional information as requested. Also, further science will be collected, in anticipation of continued dialogue and future meetings. It was suggested the group then discuss future meetings, frequency, appointment of chair (favourable to both industries), etc.
- All Fishers present, as representatives of their entire industry, strongly reiterated that they will not support a pipe going into the Strait. Even if the science is proven and NPNS receives approval for the EA, the installation of a pipe will not proceed under any circumstances. They urged NPNS/Dillon to work over Christmas on a new treatment option. In the meantime, the Fishers would consider the day's discussions to evaluate if there would be any value in future meetings.
- NPNS acknowledged that it has looked at both industries, heard from both loud and clear, and wish the dialogue to continue so we may find common ground. NPNS committed to digest comments/concerns raised, would look at other options for the long-term success of both industries, and was willing to consider today the first of a series of meetings.

In Closing

- The Facilitator once again thanked all participants for their candor and willingness to meet and share information.
- MLA ██████ thanked everyone for attending. She confirmed that she had had discussions with ██████, as well as discussions with Bruce Chapman. Beyond the two industries at the table, she advised that she also represents landowners, tourism operators, and many others.
- Representatives of both industries thanked all for the courtesy and professionalism extended in the meeting and individually exchanged Best Wishes for the Holidays.

Meeting Adjourned

**Meeting of Fishers of Northumberland Strait (Fishers) & Northern Pulp (NPNS)
Re: Proposed Effluent Treatment Facility Replacement (ETF)
February 8, 2018 – 1 PM – Holiday Inn Express, Stellarton**

In Attendance:

- Facilitator, Dillon Consulting Limited
- Northumberland Fishermen's Association
- Gulf Nova Scotia Fishermen's Coalition
- Gulf Nova Scotia Fleet Planning Board (Recorder)
- PEI Fishermen's Association
- PEI Fishermen's Association (Southern Kings & Queens)
- PEI Fishermen's Association (Biologist)
- PEI Fishermen's Association
- Northumberland Fishermen's Association
- Northumberland Fishermen's Association
- Gulf Nova Scotia Bonafide Fishermen's Association
- Maritime Fishermen's Union Local 4
- Chief, Pictou Landing First Nation
- Band Council Member, Pictou Landing First Nation
- Band Council Member, Pictou Landing First Nation
- Pictou Landing First Nation, Fisheries Coordinator
- Pictou Landing First Nation, Boat Harbour Remediation Project
- General Manager, Northern Pulp
- Technical Manager, Northern Pulp
- Director of Communications, Paper Excellence
- Dillon Consulting Limited
- Dillon Consulting Limited
- EA & Community Relations Coordinator, Northern Pulp (Recorder)

Absent:

- Inverness South Fishermen's Association
- Maritime Fishermen's Union Local 4
- Nova Scotia Department of Transportation & Infrastructure (TIR)

1. Welcome & Introductions

- [REDACTED] facilitator, spoke to his 30 years' working with people to have difficult conversations. He advised that the best way to persuade others was to listen, then encourage communication to reach resolution. Both the fishing and forest industries need resolution for the future. He stressed his role was to help both industries engage in quality conversation, but that it was the industry representatives present who have authority.
- All present were invited to introduce themselves (as noted above)
- The Facilitator thanked Pictou Landing First Nation for hosting this meeting on First Nation Territory. He then invited [REDACTED] and [REDACTED] to provide opening statements.
- [REDACTED] expressed interest in discussing ways in which all could move forward. At the last meeting Fishers were adamant there would be no pipe in the Strait and that position has not changed. The Fishers working group and PLFN Fishers are working side-by-side, along with

another key player from the Maritime Fishers Association in New Brunswick (however, the representative was unable to attend today). The Fishers in attendance were open to discuss alternative plans and to assist the Consultants & NPNS extract information about the fisheries. The Fishers were willing to share their experience and knowledge, to help build a plan where both the mill and the fisheries can co-exist.

- ██████████ thanked ██████████ and reiterated NPNS' desire to work together, to better understand the fishing industry, and welcomed the Fishers' willingness to help educate all those involved in the proposed project. He looked forward to meaningful dialogue and was here to answer to some of the questions raised at the last meeting.

2. Review action items from December 2017 meeting record

2.1. Receiving Water Study

- At the last meeting, the Receiving Water Study (RWS) wasn't on website. NPNS added the letter and report on the website, and also forwarded it to ██████████ late December. Fishers asked that a separate meeting be set-up to review details of the RWS. NPNS agreed to do so and had suggested that representatives of Stantec be in attendance to answer specific questions. NPNS asked if questions could be provided in the interim.
- Fishers noted that map(s) and information re: commercial, recreational, aboriginal fishing, contained in the RWS were incorrect. The Consultant advised that, with the additional information collected from Fishers, corrected map(s) will be produced.
- Questions were raised re: sources used and the accuracy of their information in the RWS (i.e. weather, high winds, ferry cancellation, etc.) Fishers queried why Fishers or First Nations had not be contacted sooner because they would have provided accurate data. After discussion, it was agreed to focus on working together moving forward.
- Fishers then opened the conversation about time constraints on NPNS/Consultants to do all work necessary for a successful outcome and reiterated that Fishers would accept no less than having all work/studies done properly.
- The Facilitator advised that the timeframe in which to complete the application is outside NPNS/Consultants' control. Everyone present understands that time is running out.
- Discussion then turned to availability to next meet to discuss the RWS. It was agreed to set up a meeting for Tuesday, February 20th, 12:00 to 3:30 pm. It was also agreed that, in advance, ██████████ would forward to NPNS questions to be addressed by Stantec at the meeting.

2.2. Market Analysis

- A question was raised, if NPNS' product is sent to Asia to be made into other products, why does it need to be bleached? The response was that the market wants white pulp. Manufacturers buy NPNS' pulp to blend it (20%) with other products (80%) to strengthen their finished product.
- Discussion ensued re: peroxide bleaching. It is a different process than what is used at the Mill. Peroxide bleaching is not permanent; it is different from whitening. Bleaching is sometimes used at mechanical pulp mills. A question was raised if a change in NPNS's pulp process would affect its final product. NPNS' response was that its customers need a white pulp (not a bleached) to ensure the customers' final product remains white.
- Fishers asked and NPNS agreed to host a tour of the Mill to better understand the Mill's pulp process. A tour can accommodate a maximum of 30 people at one time.

- After the last meeting, NPNS hired a market analyst to investigate other markets and processes (copies of the full report were available at the meeting for further review).
- NPNS is located in Eastern Canada and has a premier pulp for tissue and paper. NPNS asked what other products could be produced that would generate less effluent:
 - Cement Fibre Board (Unbleached Kraft – UBK) – Coarse fibre would be best for that product (southern pine).
 - Mechanical Pulp Market – Paper Excellence has two mechanical pulp mills – Meadow Lake and Chetwynd. Chetwynd is currently idle due to soft market conditions and saturation. It would not be economically viable for a mechanical pulp mill in Nova Scotia due to electricity costs.
- For the fibre grown in Nova Scotia, Bleached Kraft Pulp (BKP) is the best market for NPNS' resource and business climate. NPNS' customers/partners are in Asia – it is a captured market for tissue, toilet paper, etc.
- In NPNS' pulping process, the mill generates ~85-90% of its own power. If the Mill was to change products, it would have a mill similar to Port Hawkesbury Paper (PHP). Approx. 12-18% of province's energy load is used by PHP.

2.3. Lobster Studies

- At the last meeting it was made clear that the studies were to be conducted 'beyond lobster.' The Consultants have continued to do a lot of study and those findings will be fed into the information going forward. Fishers were encouraged to send any additional studies to NPNS/Consultants so they may be included in the documentation. The Consultants have also been in contact with many researchers of what analyses can/should be done. They will try to support as much as they can moving forward – they don't have answers right now.
- Fishers expressed concerns around doing other work and the time constraints in which to do that work. The Consultants have not yet discussed this.
- Questions were raised re: the location of similar outfalls in the Maritimes. Examples given included Irving (Saint John) which discharges into the Saint John River and PHP which has outfall in the Strait of Canso. PHP operated a chemical pulp mill using elemental chlorine and later chlorine dioxide to bleach the pulp until 1995-1996.
- Discussion then ensued, given the daily volume of effluent with solids, would this not result in an accumulation of slime on the Strait floor? The response was that solids are 98% biodegradable.
- Another concern raised was in relation to the Shell Fish Harvesting Closure zone at Boat Harbour. With the pipe now proposed to go out further into the Strait, would this not potentially increase the size of that closure area? Fishers feel it is very important to know what will be the chemical composition of the effluent to be discharged from the outfall. NPNS explained how that may be difficult because it would be determined by the make-up of the wood being processed on any given day.
- NPNS/Consultants were asked how they plan to submit the project application to the NS Government in July, without a lobster larvae study. A lengthy discussion ensued regarding the natural process involved for female lobsters to release larvae (degrees, external carrying, point of release, etc.) and Fishers were concerned, if the Consultants' researchers have found a way to do this in advance, what would be the possible effects of such an artificial release?
- Consultants advised that they are working with the researchers. They advised that today's conversations were helpful in understanding of limits and information gleaned will be taken

back to the researchers. [REDACTED] and [REDACTED] (Consultant) to compare lists of consultants to reach consensus of which ones to contact.

- Communication – It was [REDACTED] understanding that all studies were to be delivered to PLFN’s legal counsel so that he, in turn, would review with the Band. She expressed concern about not having received hard copies of the RWS, 2016 EEM Report, and the Market Analysis. [REDACTED] apologized to [REDACTED] and advised that such future documentation would be delivered to PLFN’s legal counsel.
- Discussion then ensued about the possibility of an exclusion zone and, if so, approximately how large would it be. Questions were raised whether additional studies would be conducted on other species (herring, mackerel, smelts, bass, etc.) The Consultant responded that that determination had not yet been made – at present, the Consultant has information on Lobster. The Consultant will reach out to the researchers re: next step on this matter.
- Fishers issued a reminder that years ago studies were species specific, now we study the ecosystem. We must be careful not to focus only on lobster – it’s important to do a full inventory of the ecosystem to look at all species. For instance, keystone species are not commercial, but they are important to the commercial fisheries.

3. Discuss options considered for alternative effluent disposal methods

3.1. Review and discuss criteria used to evaluate options

- Copies of a memo regarding the alternatives considered for the disposal of treated effluent were available for reference.
- [REDACTED] (Consultant) led the discussion sharing the thought through different options and alternatives; identifying the basics to carrying forward before looking at species or impacts; the practical standpoint of capacity; the viability the Mill to stay open; and environmental protection.
- Fishers were alarmed by the use of “minimize potential impact” under Environmental Protection. They stressed that no amount of impact is acceptable to the risk of their livelihood.
- It was clarified that Pulp & Paper Effluent Regulations (PPER) fall under Federal jurisdiction; other laws and/or regulations fall under Provincial jurisdiction (i.e. municipal treatment).

3.2. Review and discuss possible options

- **1. Trucking the treated effluent:**
 - To handle the capacity of 1,400 loads daily, it would take 16 hrs /day per truck of 100 trucks/hour. From a capacity standpoint, it is not practical. Where the effluent would be transported would be another question (discussed in later option). Factors considered were day-in and day-out loading, movement in and out of the Mill of a large fleet of trucks, wear of road infrastructure, noise, etc.
- **2. Piping on land to an alternate outfall:**
 - Opposed to marine vs. land discharge area – It would be susceptible to weather, additional infrastructure would be needed, additional municipal approvals would be

required and a new outfall location would be needed. A question was asked if the East or West Rivers could be considered. Relocation of the outfall would require hearing from the communities in which the new location would be proposed.

- **3. Alternate ocean discharge:**
 - Questions were asked about the result of possible ice damage to the diffusers. NPNS advised that effluent entering the pipe would already be treated. Testing results of NPNS' effluent shows better than Federal regulations. Contingency planning is underway by the engineering team.
 - Questions were raised that if damage to diffusers did occur, how quickly the Mill would know and what would be the corrective action? Those questions would be answered by the EA, which will outline monitoring and actions.
 - Methods of monitoring and corrective actions will be determined by the experts. The determination of where the effluent would go and how it would go is important.
 - Testing of effluent and the impact of introducing Oxygen Delignification (O2D) into the pulping process was discussed. The mill tests effluent daily and submits a monthly summary report (daily findings are filed monthly).
 - Fishers inquired about the parameters used for effluent testing (beyond BOD, COD, dioxins & furans) – is testing done for temperature? NPNS will provide a copy of those required under the IA. Environment Canada also conducts random sampling.
 - Discussion then turned to Boat Harbour (Points C & D). EEM is only for 3 years and there appears to be a lot of discrepancies (switching between the two points). NPNS explained that protocols are directed by Environment Canada and they are customized to each mill. The change point for monitoring was made in 2009. The new proposed ETF will not have a 30-day settling period. NPNS suggested that it would be beneficial to set up separate meeting to tour the current ETF.

- **4. Permitted municipal wastewater treatment facility (WWTF):**
 - Discussions then turned to how would we propose to do this: put it through municipal WWTF? Because of the additional capacity needed, this approach would not be practical.
 - Fishers suggested the possibility of splitting capacity between Pictou and New Glasgow. The Consultants advised that the municipalities would bear the burden of meeting Federal PPER regulations.

- **5. Private wastewater treatment facility (WWTF):**
 - Once again, the matter of logistics comes into play – trucking, piping overland, adjusting capacity, available land to do so, etc.

- **6. Land based disposal/Irrigation**
 - This would entail taking treated effluent to land that has been permitted for use and discharging it. This has not been approved in Nova Scotia. The challenge with finding lands taking into account the water, soil, seasons, etc.

- **7. Barge to Ocean Discharge:**
 - Approval would have to be sought to do this. Once again, the matter of logistics comes into play (trucking, barges, building a new loading area, etc.)
 - The Fisheries requested more information about this option. Consultants will investigate further and provide their findings back to Ms. Giffin.

- **8. Discharge anywhere into Pictou Harbour (downstream of causeway):**
 - RWS determined that, due to lack of movement inside of Pictou Harbour, the nutrients would accumulate - therefore, not considered a viable option.
 - It was made clear that the Fishers would officially file their comments with the Government and that comments being shared with NPNS/Consultants during these meetings is not/nor is to be considered their official position.
 - **9. Discharge back to Middle River:**
 - Doing so would raise some of the same high-level concerns re: chlorides and minerals. It was removed from the list of options.
 - It the same concern raised about recycling into the mill and its effects on mill equipment – it's the salt that is damaging.
 - Fishers asked if it would be possible to consider combining a number of these options (essentially, splitting the volume of the effluent into a number of areas – i.e. both rivers, and WWTFs in Pictou and New Glasgow) to handle the effluent.
 - **10. Discharge to the outlet of Boat Harbour (existing location at point D):**
 - This would go against the *Boat Harbour Act*. The outfall would remain the same, the only difference would be how it travelled to the point D. It is not a viable option.
-
- **11. Status Quo:**
 - Due to legislation, this option is a non-starter.

3.3. Identify any further areas of review necessary to confirm disposal method options

- Fishers expressed frustration that 50 years ago, a decision was made to allow effluent to be discharged into Boat Harbour and turned it into what it is today. If the proposed new ETF doesn't work, when will this new problem be fixed? Will the Mill be allowed to continue to operate for another 50 years?
- NPNS cannot speak to a decision made 50 years ago.
- NPNS/Consultants were asked what happens now if the fish in the Strait die – what is the back-up plan? It was explained that as part of the EA there will be requirements through the EEM and there will be ongoing monitoring and triggers for action.
- Science never guarantees 100% safety. Science is based on studies/modeling. The Consultants asked, if the project is approved as proposed, what triggers would the Fishers like to see considered. Fishers reiterated that the only acceptable outcome is one that poses zero risk to the Fishing industry.

4. Identify any further areas of review necessary to confirm disposal method options

- The Facilitator stated that NPNS had agreed to provide information requested for review and action in a practical way. NPNS confirmed Stantec's availability for a meeting on February 20th.
- All present were made aware of the process following for the construction of the Confederation Bridge and discussions undertaken by consultants and representatives of the Fisheries from PEI and New Brunswick. It was the understanding of Fishers that losses would be compensated,

however, no compensation (or in some cases, minimal compensation) was made even though losses had occurred.

- The Facilitator asked if the participants felt positive actions resulted from today's meeting.
- ██████ was pleased that participants are still engaging, which is positive. The Fishers stance has not changed, and stressed that a solution needs to be found without a pipe going into the Strait. To understand the Fishers position, is to realize a new design must be developed so that we can make sure both industries continue to exist, unharmed. He encouraged ██████ to call anytime he wished to discuss the project.
- ██████ too was pleased that all parties continued to discuss things. He thought that today's dialogue was productive and looked forward to future meetings. He still believes that together a solution can be found to ensure the future of both industries.
- ██████ spoke to the major gaps identified in the science. He reiterated the need to focus on ecosystem vs species-specific. He expressed concern that today's agenda/discussions was focused in defence of the pipe vs. other options. He felt NPNS/Consultants had provided more information, but the conclusion is still a pipe. ██████ spoke frankly that, to date NPNS/Consultants have not yet found solution which does not involve a pipe. NPNS/Consultants continue work on it, are still gathering information, and want to learn more.
- ██████ expressed thanks for the invitation to meeting, made through the Fishers. She urged everyone to think beyond science and think of the First Nations and have they have been impacted for the past 50 years. ██████ urged everyone to consider the environment as a whole (not only water, but land and air as well) because the Mill will continue to operate. The cultural aspect must also be taken into account. The First Nations have been here since time immemorial, it has lost and it fears for the future. ██████ expressed disappointment with the day's discussions and was worried that the whole ecosystem is being overshadowed by focus on the fishing industry.
- The Facilitator closed by stating that with small hopeful steps, everyone will begin to feel more confident. NPNS will provide the information requested in today's meeting. ██████ will forward the questions to NPNS to prep for the next meeting.
- He reflected that conversations regarding risk are difficult conversations. It is important that we continue to share information.

Meeting adjourned at 3:48 PM

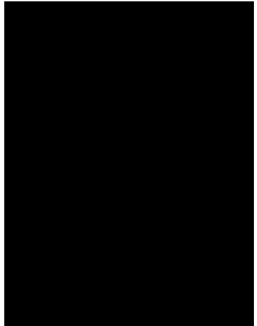
**Meeting of Fishers of Northumberland Strait (Fishers) & Northern Pulp (NPNS)
Re: Proposed Effluent Treatment Facility Replacement (ETF)
February 20, 2018 – 12 Noon – Summer Street Industries, New Glasgow**

In Attendance:



- Northumberland Fishermen's Association
- Gulf Nova Scotia Fishermen's Coalition
- Gulf Nova Scotia Fleet Planning Board (Recorder)
- PEI Fishermen's Association
- PEI Fishermen's Association (Southern Kings & Queens)
- PEI Fishermen's Association (Biologist)
- Northumberland Fishermen's Association
- Northumberland Fishermen's Association
- Gulf Nova Scotia Bonafide Fishermen's Association
- Maritime Fishermen's Union Local 4
- Nova Scotia Department of Transportation & Infrastructure (TIR)
- General Manager, Northern Pulp
- Technical Manager, Northern Pulp
- Director of Communications, Paper Excellence
- EA to Director of Communications, Paper Excellence
- Dillon Consulting Limited
- Dillon Consulting Limited
- Senior Marine Scientist, Stantec
- EA & Community Relations Coordinator, Northern Pulp (Recorder)

Absent:



- Inverness South Fishermen's Association
- PEI Fishermen's Association
- Maritime Fishermen's Union Local 4
- Maritime Fishermen's Union Local 4
- Chief, Pictou Landing First Nation
- Band Council Member, Pictou Landing First Nation
- Band Council Member, Pictou Landing First Nation
- Pictou Landing First Nation, Fisheries Coordinator
- Pictou Landing First Nation, Boat Harbour Remediation Project

1. Welcome & Introductions

- The meeting commenced with a quick introduction of all in attendance. The purpose of the meeting was to review the Receiving Water Study (RWS) and videos conducted by Stantec.
- KSH had contracted Stantec to conduct a study of the Pictou Harbour/Northumberland Strait area to find a marine outfall for the proposed ETF replacement in 2017.

2. Stantec's Presentation

Introduction:

- [REDACTED] explained that the presentation would include:
 - a brief introduction (to find an outfall location for the proposed new ETF)
 - 2D Hydrodynamic modelling and outfall selection (at a large distance – big picture view)
 - 3D CORMIX plume modelling at the outfall (3D vertical x axis view) to design diffuser and mixing zone
 - Engineering considerations for the proposed pipeline (preliminary engineering study)
- Fishers requested a copy of the Stantec presentation and it was agreed to do so.

2D Hydrodynamic modelling and outfall selection:

- Objectives – to understand current characteristics and circulation patterns, effluent dispersion (patterns, extent and dilution factors of discharged effluent), to identify preliminary end-of-pipe outfall location, and provide information required for near-field dispersion modeling.
- Study area was identified as: East River estuary, Pictou Harbour, Pictou Road, Boat Harbour, offshore open water of Northumberland Strait.
- Reviewed available data – sea bed bathymetry, tides and currents, winds, marine water temperature and salinity, and river discharge flows. Fishers questioned validity of data sources listed.
- Stantec provided an explanation of the model set up using triangular meshes where at each node a compilation is done. Fishers questioned if the actual size of the grid (triangle) was included in the RWS; explanation given was the number of nodes was included and that further explanation of numerical and calculation based on real data would be provided later in the report.
- Modeling – Stantec looked at environmental sensitivities in the area (eel, smelt, herring spawning, lobster pounds, etc.). This info was selected from previous investigation/studies – including 2005 studies.
- Fishers questioned if the info had been verified and by whom (i.e. were fisheries contacted to verify who fishes in those specific areas?). Stantec advised it looked at the information known at the time (many things were studied salt marshes, migratory birds, etc. – not just one particular aspect). NPNS stated it would like the Fishers' assistance to help verify the data. Fishers stressed it had been apparent at the public meeting at Pictou Landing that Dillon was unaware of the various fisheries locations. Stantec's study had been completed prior to NPNS/Dillon's engagement sessions and engagement studies. Dillon stated the map being shown today was incomplete and is being updated. Fishers expressed concern this step was blatantly missed and that no direct consultation with the Fishers was not the best approach, as fishing areas change all the time and 2005 data would be outdated.
- NPNS stressed that the location of the outfall has not been finalized. Hence, the purpose for these engagement sessions. Fishers voiced concern that they shouldn't have to advise NPNS about this missed step and supply the updated information a couple of months before submitting the application to the province. Stantec advised that its objective was to try to pull all information together to look at the 'bigger picture' and not just one particular area. Once that was done, it would help determine where to propose the outfall.
- With regard to impact to fishery, the Fishers reiterated there should be NO IMPACT to the fishery – '100% Impact Free' will be the only acceptable outcome.
- Fishers then asked Stantec, if any areas were found that were not of ecological importance? Discussion ensued re: findings at the four different outfall locations. At Alternative D, would the findings remain the same in 50 years' time? Stantec explained consideration of the density and

how the plume behaved during a 30-day period, and a conservative exaggerated outfall was used to model. Exact coordinates are listed in the report.

- Stantec looked at A B C & D re: potential outfall (10 meters or deeper) as guidance to help locate the pipe outfall. The entire month of July 2016 data (large spring tides, least fresh water inflow from rivers) were used. 11.3 meters is the mean water level at Alternative D, the preferred location. Effluent properties and flow were provided by KSH. Modelling was done using conservative conditions [smaller tidal range than normal (less velocity)]. Discussion ensued about mean winds in July (vs. the strength of October winds). Stantec went on to explain the many factors taken into consideration for the modelling. Higher winds will promote better mixing and represent an improvement in plume.
- Fishers asked for an explanation of 'no dispersion' in particle tracking in the 2D modelling. Stantec responded that when there's no decay, there is no degradation of any effluent components. The assumption is that the effluent is not breaking down biologically (this is worst case scenario).
- Fishers questioned temperature of 14°C, surface or bottom? Response was this is ambient temperature for the different models and is modelled to be homogenous through the water column. Fishers stated that temperatures have changed since 1999 – which, without confirmation, could be a 'gross deviation' that would make changes (the plume won't rise as fast in the winter time, so when the temperature changes would it mix faster, dilute faster?) Stantec did not feel that temperature increase from 1999 would have an appreciable effect on the model.
- Velocity of effluent from the pipe for 85,000 m³/d peak flow – Fishers questioned the pressure. Stantec explained, in the 2D modeling the flow rate is important – but it doesn't take into consideration size of the pipe for the 2D modelling (it is more relevant to the 3D modelling). NPNS further explained the pump pressure is a design engineering calculation – the pump pressure is designed to overcome the friction losses in the pipe and to overcome the water column height at the end of the diffuser. The elastomeric duck bill openings ensure velocity is maintained. Pressure and velocity are two very different things.
- Fishers asked if temperature changes within a 24 hour period were considered. Stantec advised that inversion was not part of the modelling (i.e. up or down 8 degrees) – the modelling captured conservative elements on a daily basis.
- Stantec further explained that the study outcomes were based on Worst Case Scenarios (summertime, low wind, max effluent quality with no decay, minimum river inflow, maximum effluent flow, etc.). It was agreed that wind speed in July is less strong than winter months.
- Stantec then ran the modelling video of Alternative A Outfall (closest to the mill). This model, open to the tides, showed a full month at daily maximum of effluent every day for 30 days straight based on July 2016 conditions. Keeping in mind, the modelling illustrates movement only (ping-pong balls not effluent).
- Then video modelling for Alternative B Outfall (closer to Pictou/lighthouse beach) was shown. In that model, it was possible that the tide was being clipped by the causeway. It showed similar results to Alternative A. Discussion then ensued re: dilution factors.
- Then video modelling for Alternative C Outfall (a little further out into Pictou Road area of the Strait) was shown. It illustrated better dilution and mixing than Alternatives within the Pictou Harbour.
- Lastly, video modelling for Alternative D Outfall (further out in the Strait) was shown. Results showed no dispersion of effluent into Boat Harbour and improved effluent mixing and dilution due to increased depth at the outfall.

- Observation was made that the movement is really dynamic over the period of a month – it's not a given that it would be the same each and every day.
- In summary, Stantec reported, based on conservative 2D modelling:
 - Alternatives A & B – with restriction by lighthouse beach may result in accumulative effluent over time due to poor movement in and out of the harbour
 - Alternatives A, B & C – possibility of some effluent backflow into Boat Harbour
 - Alternatives C & D – less potential of cumulative effects of effluent on the fisheries [both would be acceptable by Canadian Council of Ministers of the Environment (CCME) guidelines]
 - Alternative D – Preferred Location – no dispersion into Boat Harbour and higher effluent dilution
- Fishers questioned if consultants had studied dispersion of the effluent as of today? Response was that that could be looked at.
- Fishers questioned if there was a worry about backwash into Boat Harbour, but not about the Strait. Response was that Boat Harbour and Pictou Harbour are both confined spaces with narrow openings. Fishers voiced that if it was good enough to go into the Strait, it should be OK for Pictou Harbour or Boat Harbour.
- Stantec reiterated that their objective was to find a preferred location with the minimum concentrations and to achieve the best dilution.

3D CORMIX Plume Modelling at Preferred Outfall:

- Stantec mentioned that the 3D modelling was done one hour from slack tide (choosing this point in the tide cycle is also conservative).
- Stantec identified the objectives: how the plume would act in 3D modelling, evaluate compliance under federal and provincial guidelines under conservative ambient conditions (no decay, maximum discharge, etc.), review various outfall configurations (run different tests with different numbers of ports, angles, parameters, etc.).
- Fishers asked if software was peer reviewed. Yes, the software had been peer reviewed.
- The regulatory zone selected was 100 meters from the CCME guidelines.
- Stantec reviewed the list of ambient and effluent conditions provided by KSH and then outlined the different scenarios for Outfall Diffusers:
 - Scenario 1 – 1 port – dilution was not effective
 - Scenario 2 – 3 ports – dilution is improving
 - Scenario 3 – 6 ports – getting faster dilution sooner
 - Scenario 4 – 6 ports with reduced flow – showed that lower flow leads to better effluent mixing
- It was noted that velocity was equal between the 6 ports
- Fishers asked how much dilution will it take to ensure crustaceans and fish do not die in the salt water. Response was that answers were contained further in report – salinity meets background in 100 meters. Stantec also said at 5 meters from the diffuser the plume is 2% less dense than background seawater.
- Stantec reviewed the results of the 3D modelling at Alternative C – the water quality at the end of the mixing zone (distance from the diffuser and dilution ratio).
- Fishers asked if the effluent lays on the bottom and oxygen is lost, would it not create a dead zone? Response was, no because the effluent isn't stagnant.
- Clarification was sought re: mixing zone being 100 meters from each diffuser port. Stantec responded that the 100 meters was set up from the centre of the Diffuser (not the ends of the

Diffuser). Fishers stated diagrams as shown were very confusing – 100 meters is in the direction of flow, not along length of pipe.

- Stantec then reviewed results of 3D modelling at Alternative D
 - 3 ports – less concentration within the dilution zone (57.6%), and
 - 6 ports – past 109% with very fast dilution
- Overall Summary – 6 ports were more effective at Alternative D; however both Alternatives C & D would meet CCME guidelines. Fish would not be harmed by the ports due to the velocity of effluent being discharged.
- Conclusion – Alternative D was the selected location due to improved dilution and no dispersion of effluent into Boat Harbour – meeting all requirements for background concentrations, salinity and temperature.
- Fishers felt this comparison did not match up to the ‘ping pong ball’ modelling (2D). Stantec explained that the 2D modelling was done assuming 1 port.
- The meeting then took a short break and resumed at 2:15 PM.

Engineering Considerations for Effluent Pipeline:

- Stantec re-opened the meeting by identifying the engineering considerations – geotechnical, marine structure, and civil engineering.
- Questions were posed the about of drilling/blasting required to lay the pipe, what would happen to the displaced land, and would the dredge result in a sediment plume? Responses were that this would be determined by the geotechnical surveys, which will be done when the area is ice-free. Depending on the quality of the materials displaced, it may be used as backfill around the pipe. With respect to a sediment plume, once again that will depend on the material. It is not uncommon to employ silt curtains around the work. NPNS advised that information will be collected when the ice goes out to allow geotechnical work to get underway.
- Fishers observed that NPNS/Consultants have an extensive ‘to do’ list. NPNS agreed and, as is the purpose of this engagement process, that list continues to grow.
- There is no estimates on costs yet – however, this work will represent a significant part of the project. The route of the pipe will be based on the findings of the geotechnical work (underwater cameras) in the coming months.
- Fishers inquired if harbour studies are being done for DFO. Yes.

4. Wrap Up Discussions

- One Fisher leader advised Stantec that it was a good presentation. However, the Fishers’ position has not changed but felt the presentation provided more of the picture.
- Fishers felt the RWS requires more work. Stantec spoke to future monitoring.
- Fishers expressed concern about the ‘Sign-off Sheet’ at the beginning of the RWS, specifically, “Any reliance on this document on any third party is strictly prohibited ... Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.” They stated that if the information is not correct, then Stantec is not responsible. Stantec replied that they don’t verify DFO’s data or other reports used in the model.
- Fishers felt nobody wants to take responsibility.
- It was agreed that more understanding is needed with regard to ice and possible damage to the line or diffuser.

- One Fisher leader said that NPNS/Consultants were presenting fake news like Facebook. He reiterated that the Fishers had not changed their position. There will be “no pipe – we will not waiver.” Until a plan is presented that does not include a pipe, Fishers see no point in meeting further. He stressed that those at the table represent all Fishers and all Fishers don’t want a pipe. So the Fishers are going to spend the next few months concentrating on how they will move forward to fight the pipe.
- ██████████ stated the importance of correcting/updating the fishing ground map/data. He asked for the Fishers assistance of a smaller team to work with NPNS/Consultants to identify the various finishing grounds. Dillon further explained that DFO had asked the project team to get the corrected/updated information directly from the Fishers.
- Fishers suggested that NPNS/Consultants send a request for the information to the Fishers in writing. The Fishers will consider the request when received. *Done – Letter was sent.*
- A Fisher leader stated that, if the mill is right, in 30 years we can have a fishery and a mill; but if the Fishers are right, there will only be a mill.
- ██████████ stated that – 1) with changes inside the mill, the effluent released into the Strait will be better than it is now, and 2) no pipe means no mill – without the project going forward, there will be no mill. Reconsideration was asked.
- Dillon asked if the Fishers were still interested in talking to Ecometrix for the EEM? Response was maybe.

Meeting adjourned at 2:54 PM

Attachment:

Receiving Water Study for the Marine Outfall of Northern Pulp’s Effluent Treatment Plant Replacement Project – *Stantec – February 20, 2018*



NORTHERN PULP
NOVA SCOTIA CORPORATION
A PAPER EXCELLENCE COMPANY

February 23, 2018

TO: [REDACTED] President, Northumberland Fishermen's Association
[REDACTED] President, Gulf Nova Scotia Fishermen's Coalition

On behalf of the project team at Northern Pulp, thank you for our most recent meeting on February 20 at which Stantec provided a comprehensive review of the Receiving Water Study (RWS). As was the case at our earlier meetings on December 21 and February 8, your group posed many good questions, which led to frank discussions. We appreciate your candor during those engagement sessions.

In follow-up to this week's meeting, I would like to continue conversations regarding two specific topics raised in our discussions: a review of the location of fisheries in the region, and further discussion of environmental monitoring.

We heard throughout various public engagement sessions, and again with your group on February 20, the maps of the fisheries used in the RWS are incomplete. It is very important to all concerned that the maps contain the most up-to-date information. As those who fish and are most familiar with the area, you have the best knowledge of the fishery. Therefore, we respectfully request that a smaller committee be formed to review the fishery maps, with an emphasis on the fisheries in Pictou Harbour, Pictou Road and the Northumberland Strait near the entrance to Pictou Road.

Monitoring of the environment was an issue of importance also raised at the public engagements. In response, the most recent report of Environmental Effects Monitoring (EEM) of the current effluent treatment system has been posted on the project website (www.northernpulpfuture.ca). The project team will soon be meeting with EEM consultants to design a monitoring program for the new treatment facility. Your input into this program is important to us and, as such, we ask for your contribution into the EEM design. Please provide a contact name of the appropriate person with whom we should work and we will reach out to that individual promptly.

We fully understand the concerns expressed by the members of your associations and we have every intention to get this project right – for your members and our own. We must protect the environment and we must protect the economy – that is our commitment to all.

Northern Pulp Nova Scotia Corporation, a Paper Excellence Company
P.O. Box 549, Station Main, New Glasgow, NS B2H 5E8
260 Granton Abercrombie Branch Road, Abercrombie, NS B2H 5C6
T: 902.752.8461 | F: 902.752.9149 | info@northernpulp.com
www.northernpulp.com | www.paperexcellence.com

This project is critical to the livelihood of many citizens of Nova Scotia and PEI. Fishers, fish plant employees, pulp mill and sawmill employees, and wood harvesting contractors and their employees are all dependent on the outcome of this project. We ask that you continue the engagement process to ensure we have the best and most informed design project possible.

Sincerely,



Bruce Chapman
General Manager, Northern Pulp

Copy: All Participants at Meetings of Fishers of Northumberland Strait & NPNS

**Meeting of Fishermen’s Working Group (FWG) & Northern Pulp (NPNS)
Re: Proposed Effluent Treatment Facility Replacement (ETF)
October 22, 2018 – 9:30 am – Pictou Landing First Nation**

In Attendance:

PLFN:

PEIFA:

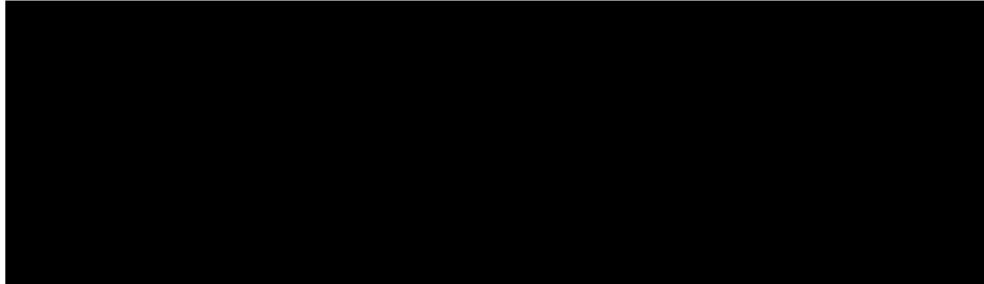
NFA and/or

GNSFPB:

MFU:

Legal FWG:

NPNS:



1. Introduction & Welcome:

- The meeting commenced with a quick introduction of all in attendance.
- NPNS outlined Meeting Agenda:
 - Discussion of proposed Caribou Outfall location
 - Formation of Technical Advisory Committee
 - ETF Project status update
 - Next Steps
- Request was made to start with an update on Mill shutdown and effluent leak.

2. Effluent Leak:

- NPNS commenced scheduled annual maintenance shutdown October 20.
- NPNS received report of spill from resident at approx. 9:20 am, October 21. NPNS personnel investigated immediately and confirmed leak within minutes. Immediate action taken to stop effluent flow and notify authorities.
- Consultant on site – assessment done and remediation underway. Leak much smaller than spill of 2014; effluent did not reach the river.
- Consultant investigating cause – leak in fiberglass line.
- Discussion then moved back to agenda items.

3. ETF Project Update

- Detailed engineering – work is ongoing, vendor has been selected and planning is well underway. KSH Montreal is consulting; other companies will be involved at various project stages (i.e. on land design work).
- Treated Effluent Discharge Option Considerations (routes mapped):
 - Pictou Road Route (previously identified)
 - Route had been discussed at earlier meetings – now extended 3-4 kms
 - Caribou Route (partial overland option for new discussion)

- Route takes path offset from the ferry channel: deeper water, currents lead to better dispersion
- Preliminary results of dispersion tests conducted at Outfall CH-A (25 meters in depth) and Outfall CH-B (approx. 5 kms away) – a) both outfalls showed improved dispersion over Pictou Road Route outfall and b) Outfall CH-B showed better dispersion over Outfall CH-A. 3-D Modelling was conducted at Outfall CH-B
- NPNS made clear that both Pictou Road Route (with extension) and the Caribou Route (overland) are being considered. Media had reported that the Pictou Road route was not possible, this is incorrect.

4. Responses to questions/general comments to agenda discussions:

- RWS, conducted by Stantec, showed modelling of the plume at Outfall CH-B. Effluent is more diluted at the end of the 100 m mixing zone – 0.5% concentration as opposed to roughly 1.0% concentration at the end of the mixing zone in Pictou Road location.
- NPNS once again requested assistance of Fishers to help identify the exact areas where they fish near the Caribou discharge. This information was previously requested for the Pictou Road area, but was never provided.
- In exploring Caribou Route, NPNS is in discussion with NS TIR regarding overland path.
- Fishers asked when the marine survey would begin. NPNS answered today or tomorrow.
- With an approved EA, construction of the new ETF can commence. The processes has been selected – the next step is detailed design of the building (electrical, piping etc.)
- O₂ Delignification – Primary focus at this time is completion of ETF Project by January 2020. O₂ Delig will follow a couple of years later. NPNS currently sitting in first or second quartile of all Kraft mills in Canada for BOD and TSS and expects to stay there with the new system.
- FWG expressed concern that meeting the deadline is no longer possible – that with EA approval, project registration, construction, biological start-up, seasonal conditions, etc. the timely project completion seems highly unlikely.
- NPNS acknowledged the facility cannot operate without an effluent treatment facility and an outfall – ‘hot idle’ is not a possibility. It also acknowledged the January 2020 deadline is extremely challenging but that ways are being investigated to improve the current schedule [ex. shortened time (2-3 months) in which to grow organisms for biological treatment of effluent].
- When questioned if there is a Plan ‘B’ should it become clear that the deadline cannot be met, NPNS reaffirmed that its entire focus is on moving the current project forward. An extension of the deadline has not been made. NPNS is actively exploring every avenue possible to meet the deadline – hence, the request for assistance from the Fishers to identify specific fishing areas.
- It was also acknowledged that changing the EA application from Class I to Class II would result in further time delays. Environmental sustainability is an important component of both Class I or Class II assessments.
- FWG questioned why the fishing community had not been consulted earlier. NPNS acknowledged it had not in the early days of the project development. Since December 2017 consultation has been ongoing, including a written request for assistance – with no reply. NPNS once again requested assistance in identifying specific fishing areas. FWG questioned if doing so at this late date would change anything.

- NPNS agreed that information sharing will not change some things – such as, a bleached Kraft mill cannot operation without an outfall – but it would help the company in other areas of consideration.
- FWG questioned if there's another possible solution – have all other options been exhausted. NPNS responded that all over the world, the pulp industry discharges into a receiving water. In the east and the west, this is standard technology. The vendor selected by NPNS is a world leader in the design of bleached Kraft mill effluent treatment systems.
- PEIFA and others expressed frustration with the lack of engagement that has occurred between fishers and the Province of Nova Scotia and shared that multiple requests for meetings with various departments have not been granted.

5. Formation of a Technical Advisory Committee:

- To continue the topic of information-sharing, NPNS opened discussion on the possible formation of a Technical Advisory Committee and invited thoughts as to how this could be effectively structured. Around the table, questions/comments/suggestions included:
 - Terms of Reference – clear definition of purpose and structure
 - Membership – focused on technical
 - Studies and Monitoring – pre- and post-construction
- Concern was expressed that the committee may have difficulty attracting members. It was agreed that one of the most complex parts of this process is the fishery – the bulk of the committee's attention should focus on that industry.
- Discussion ensued regarding proof that the ETF Project will do no harm to the Strait. NPNS advised that the pulp and paper industry in Canada is one of the most heavily regulated and that the effluent treatment facility project proposed is an improvement over current effluent outfall conditions.
- Members of the FWG reiterated that, without 100% proof positive of zero impact, they will not accept a pipe into the Strait. They do not have confidence in the project. No matter which route is selected, they are not prepared to jeopardize the eco-system by placing a pipe with an outfall into the Strait.

6. Additional discussion/responses to questions/general comments:

- FWG questioned at what point will it be determined that the project is no longer viable. Concern was expressed for workers in forestry and on the water both now and in the future. FWG stated that without the mill, forestry operations will continue in Nova Scotia – the natural resource will remain – but without the ecosystem, the fishery will cease to exist.
- NPNS stressed that only through knowing each other's defined/specific concerns, can information be gathered and shared to address these issues. Science can provide answers to specific questions. For instance, various chemicals are used in the pulp making process, but every change in wood species requires a change in chemical make-up; it is not proprietary.
- It is known that the Province of NS has assumed responsibility for BH remediation. It was questioned if the Province had ever considered other technical options for NPNS. NPNS advised that other business options and technology options had been explored, but the only sustainable business option for continuance of the mill is to produce bleached Kraft pulp and construct a state-of-the-art treatment facility.
- Another real concern for GWF is the possible loss of Marine Stewardship Council certification(s) for lobster and others. Installation of the pipe and its impacts will be unknown, therefore, it will be difficult to evaluate.

- Discussion turned to effluent settled in the Boat Harbour lagoon. NPNS discussed testing at different BH Points – GWF asked to see a comparison of A, C & D.
- It was questioned how much effluent would settle on the Strait floor. NPNS explained that the solids at the end of any treatment system are primarily dead bug bodies, not wood, which would biodegrade naturally. Effluent is regularly tested, regulations have changed, chemistry in the mill has changed over time – so the chemicals that come out of Point A now is not the same as it would have been 20 or 30 years ago.
- Further discussion ensued about testing, natural existence of dioxins and furans in nature, P&P regulations, etc. NPNS urged the FWG to develop a list of questions for NPNS environmental team to provide answers to the group.

7. Next Steps:

- Possible Technical Advisory Committee:
 - NPNS to develop outline of draft terms of reference and forward it to FWG (Linda Townsend & Heather Hughes) for review and feedback
 - FWG verbally confirmed in a subsequent meeting that they would not participate in an advisory committee
 - No action required as offer was declined
- Identification of Specific Fishing Areas:
 - NPNS again requested assistance in the identification of fishing areas/spawning grounds near the proposed outfall locations
- Boat Harbour Test Comparison:
 - NPNS to provide comparison of test results at Points A, C & D (*provided below*)

2017 Yearly Average (Kg/d)

	TSS	BOD	COD	AOX
Point A	21,250	10,969	55,406	Not Tested
Point C	1,563	1,300	36,506	87.5
Point D	775	792	34,250	Not Tested

Meeting adjourned 11:37 am.

**Addendum to:
Meeting of Fishermen's Working Group (FWG) & Northern Pulp
(NPNS) October 22, 2018**

From: [REDACTED]
Sent: Monday, January 28, 2019 5:41 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Notes - Fishermen's Working Group & Northern Pulp - Oct 22nd Meeting

Thank you [REDACTED]

Your most recent email will be noted and filed.

Best regards,
[REDACTED]

From: [REDACTED]
Sent: Monday, January 28, 2019 5:31 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Notes - Fishermen's Working Group & Northern Pulp - Oct 22nd Meeting

Hello [REDACTED],
Please note that [REDACTED] are not "leaders" of the working group as you indicated in your response to our feedback. They are members.

[REDACTED]

[REDACTED]

On Jan 28, 2019, [REDACTED]

Hello [REDACTED]

As per the conversation between [REDACTED] this afternoon, please see comments below in "***Bold Italics***".

As the notes of the October 22, 2018 meeting have already been submitted to Dillon for EA Filing and were marked as **DRAFT NOTE** (*added January 18, 2019*) Minutes provided to Fishers January 10, 2019 – **no comments received to date**, we will attach this email chain to the notes as submitted so that your comments are registered.

Please note that contact information has been removed from below.

Best regards,

[REDACTED]

From: [REDACTED]

Sent: Monday, January 28, 2019 12:52 PM

To: [REDACTED]

Cc: [REDACTED]

Subject: Re: Notes - Fishermen's Working Group & Northern Pulp - Oct 22nd Meeting

Hello [REDACTED]

The Fishermen's Working Group (FWG) meeting attendees have reviewed your notes and have provided the following feedback and edits.

- Representatives from Pictou Landing First Nation expressed concerns about the smell at the effluent leak site, that it was strong and there appeared to be more leaked than what was reported.
- Notes indicate immediate action was taken to shut down effluent flow. It was indicated in the meeting the time frame was an hour. It was also indicated in the meeting that Northern Pulp didn't know why the pipe failed and that the last time it was inspected was 2014. FWG asked about the age of the pipe, location and methods for detecting a similar leak under water.
- Notes indicate Northern Pulp asked for specific fishing information about the outfall area but did not receive it. They were told every boat in Caribou harbour fishes at or in very close proximity to the outfall at some point during the year. They were also made aware of herring spawning grounds.
- When asked about how the overland pipe line would work, [REDACTED] replied Northern Pulp would get an easement from transportation and infrastructure therefore would have a right of way on department of highway lands. When asked who is paying for it, he said Northern Pulp was in negotiations with the province currently. When [REDACTED] was asked who would own it he said Northern Pulp was currently in negotiations with the province. When asked if it would be buried or above ground, [REDACTED] said it could be either or, or a combination of both, but did not know for sure. When asked about going over town watershed he said Northern Pulp was currently in

negotiations with the province. *Northern Pulp is not in negotiations with the province over the town watershed. This will be addressed in the EA Filing.*

- When questioned if there would be a closed fishing area and how large at the outfall, Bruce replied that was totally up to DFO and that the mill has nothing to do with it.
- FWG requested a list/breakdown of chemicals and substances in the effluent from the new facility. (This was also requested by [REDACTED] in three separate emails to [REDACTED]) [REDACTED] agreed this could be shared. We still have not received a list.
- FWG expressed human health and contamination concerns
- KSH originally said 6 months overlap with the new and old systems to allow bacterial flock growth, and to work out any issues. Northern Pulp indicated in the meeting that they've reduced that to a few months now.
- Regarding Northern Pulp's suggested Technical advisory committee, Northern Pulp promised terms of reference, detailed outline, for technical advisory committee. FWG felt that the committee was NP shifting the responsibility to the fishermen. It was indicated by FWG that they should have the experts and capacity to answer these questions.
- Your notes indicate the WG declined your proposal for a technical advisory committee in a subsequent meeting. Could you please clarify as there was no other meetings with the working group after October 22nd. There was only the meeting on October 27 with two members of NFA. *The technical advisory committee was discussed at the October 27th meeting with two leaders of the FWG. The leaders indicated that a technical advisory committee would not work. We assumed at the time that they were speaking for the WFG, but if this not the case, we would be happy to continue discussions on the technical advisory committee.*

[REDACTED]

On Jan 17, 2019, at 12:03 PM, [REDACTED] wrote:

Hello [REDACTED]

Thank you for your email.

If any changes are required, would you please send them to us by Monday, January 21st.

Best regards,

[REDACTED]

<image003.png>

From: [REDACTED]

Sent: Tuesday, January 15, 2019 8:23 AM

To: [REDACTED]

Cc: [REDACTED]

Subject: Re: Notes - Fishermen's Working Group & Northern Pulp - Oct 22nd Meeting

Hello [REDACTED]

Thank you for the below email. I have circulated the meeting notes you provided for the October 22nd meeting to attendees from Fishermen's Working Group to ensure they are correct.

[REDACTED]

On Jan 10, 2019, at 1:27 PM, Corinne Walsh wrote:

Good day [REDACTED]

Here are the notes taken at the October 22, 2018 meeting of the Fishermen's Working Group and Northern Pulp.

Would you kindly acknowledge receipt of this email.

Thank you and best regards,

[REDACTED]

<Fishermens Working Group NPNS - Meeting Notes - October 22 2018.pdf>