



**Environment and Climate Change
Office of the Minister**

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40100-30-312

May 28, 2021

Ken MacLean/Harold Johnson, Vice Presidents
Envirosoil Limited, Municipal Group of Companies
927 Rocky Lake Dr.
Bedford, Nova Scotia
B4A 3Z2

Dear Mr. MacLean and Mr. Johnson:

Re: Environmental Assessment – Envirosoil Limited – Waste Oil Recycling and Water Treatment Facility - Dartmouth, Nova Scotia.

The environmental assessment of the proposed Waste Oil Recycling and Water Treatment Facility has been completed.

This is to advise that, pursuant to section 13 (1)(a) of the Environmental Assessment Regulations, I have determined that the Registration Document provided is insufficient to allow a decision, and that I require additional information. Specifically, the review determined that the following additional information is required to evaluate the potential environmental effects that may be caused by the undertaking:

1) Facility Operation:

- a. Waste Oil/Wastewater Acceptance:
 - i. Additional information is required on the quality assurance and quality control programs (sampling and analysis) that will be undertaken in advance of material acceptance to ensure it can be treated at the facility.
 - ii. Provide additional information on the sampling and analysis to be conducted for receiving contaminated water or used oil; including the methods and criteria be applied.
 - iii. Provide details on how off-spec materials will be managed if inadvertently accepted at the facility.

- b. Waste Oil/Wastewater Sources: The Proponent shall clearly describe:
 - i. All potential sources of wastewater and waste oil.
 - ii. All contaminants of concern from each waste stream. This includes saline contamination as it is typically associated with marine bilge water.
 - iii. How each waste stream will be managed at the site to ensure appropriate treatment is applied.

- c. Waste Oil/Wastewater Treatment: The Proponent shall clearly describe the capabilities of the various wastewater treatment system units or trains and what technologies would be used in different treatment scenarios with consideration to all potential waste streams and their associated contaminants (including saline). This includes detailing the following:
 - i. Design capabilities of all potential treatment equipment and types of contaminants it is intended to remove.
 - ii. Operating limits of all potential treatment equipment (i.e. maximum acceptable concentration for the parameter that it is designed to treat).
 - iii. Identifying any make-up water requirements for the treatment process. If make-up water is required, provide the source and estimated volumes to be used.
 - iv. Any treatment units that will be required to remove any chemical additives used during the waste oil recycling process (i.e. demulsifiers).
 - v. Any equipment maintenance/cleaning processes that are required and associated waste management.

- d. Waste Oil/Wastewater Discharge: Halifax Water and other reviewers have identified serious concerns about the potential wastewater discharge having an adverse effect on the wastewater treatment facility and thus receiving environment (Halifax Harbour). The Proponent is required to prepare a Wastewater Management Plan, in consultation with, and accepted by Halifax Water. This Wastewater Management Plan should include but is not limited to:
 - i. Discharge volumes, frequencies, sampling and analysis programs, and applicable criteria to be met prior to discharge (ie. compare with Sewer Discharge Bylaw criteria, CCME marine water quality guidelines for the protection of aquatic life and the Nova Scotia Environment Contaminated Sites Regulations, Tier I EQS for surface water). This should take into consideration effluent quality, quantities, and the municipal treatment system technologies.
 - ii. Describing how wastewater discharges will be managed during pressure testing and equipment maintenance/cleaning processes.
 - iii. Describing emergency protocols in the event of a system upset and release of untreated water to Halifax Water and the marine environment.

2) Surface Water Management:

- a. Provide a Stormwater Water Management Plan prepared by a Qualified Professional which includes but is not limited to the following:
 - i. A description of all system features (including the soil berm and ditch that surrounds the Site), their design capacities, connections and discharge points. This information should also be depicted on an engineered drawing.
 - ii. A description of how all stormwater will be collected and managed prior to discharge. This includes sampling and analysis programs to be undertaken and the applicable criteria to be met prior to discharge.
 - iii. Further details on spill control and management at liquid transfer points and storage areas, such as loading and unloading racks, transfer piping and tankage. This includes any related emergency design features, operational requirements, sampling and analysis programs and applicable criteria to be met prior discharge.

If the site's drainage system permits stormwater drainage to enter the marine environment, an assessment of potential impacts to aquatic habitat and any applicable mitigation measures are required.

3) Air Emissions:

- a. Green House Gas Emissions – additional information is required on GHG emissions related to the boiler use in the treatment process (including the natural gas requirements).
- b. A complete description of all types and volumes of potential air emission contaminants associated with the wastewater sources. This includes detail on proposed controls for those contaminants.

4) Odour Control:

- a. Additional technical details are required for the odour control equipment to reflect proper sizing and maintenance, particularly for the tank that may be heated to break emulsions. More information is also required on how the Proponent will monitor the efficacy of proposed control measures and what further actions will be taken if the mitigation measures are inadequate.

5) Marine Environment:

- a. Provide an evaluation of potential impacts on the receiving marine environment for various wastewater treatment scenarios considering the capabilities of the proposed treatment technologies and limitation of the municipal treatment system.

This information must be submitted by the Proponent within one year, as an addendum to the original Registration Document. Upon submission of the information, I will have 50 days to make my decision.

The Proponent shall publish a notice in the same manner as the original notice under Section 10 of the Environmental Assessment Regulations announcing the release of the additional information to the public and stating that the written comments may be submitted about the additional information to the Department.

If you have any questions regarding the approval of this project, please contact Helen MacPhail, Supervisor, Environmental Assessment Branch, at (902) 483-2696 or via email at Helen.MacPhail@novascotia.ca.

Sincerely,



Keith Irving, MLA
Minister of Environment and Climate Change

Encl.

c: Helen MacPhail, Environment and Climate Change