



Fisheries and Oceans
Canada

Pêches et Océans
Canada

P.O. Box 1006, P500
Dartmouth, NS B2Y 4A2

February 7, 2020

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

**Subject: Northern Pulp ETF Project – Fisheries and Oceans comments on the
Draft Terms of Reference for the Environmental Assessment Report**

Dear _____,

Fisheries and Oceans Canada (DFO) received the request to review the Draft Terms of Reference (TOR) for the Environmental Assessment Report on January 8, 2020.

Subsequent to comments submitted on the Focus Report to you on November 8, 2019, a decision was made by the federal Minister of the Environment not to designate this project for a federal environmental assessment. However, DFO and other potential federal regulators are required to conduct an environmental effects evaluation of components of the project located on federal lands under Section 82 of the *Impact Assessment Act* (the Act). To this end, the comments submitted on the provincial TOR below, are not intended to cover all federal requirements that may be necessary to inform federal decision making on whether the project is likely to cause significant adverse environmental effects and potential impacts to Aboriginal and treaty rights.

As noted in the following comments the Federal Authorities may require the consideration of additional factors which may not be covered in the Provincial Environmental Assessment to fulfill their obligations under Section 82 of the Act.

Comments on the Terms of Reference:

As a general comment, the proponent should attempt to gather information directly from and collaborate with affected First Nations throughout this assessment process. Particularly with regard to development of assessment methodology (e.g., adverse and significant effects), description of environmental setting (e.g., ice conditions), and incorporation and collection of Indigenous Knowledge. Consideration of information provided will enable the proponent to evaluate potential implications for the design, installation and operation of the project and apply mitigation where necessary.

Section 3.2, Project Location, Page 11/37

The first paragraph states: “Discuss the compatibility of the Project location in relation to the people and their community and traditional activities and land uses by the Mi’kmaq of Nova Scotia.” DFO suggests that traditional activities should be further defined to include any First Nations that have an Food, Social or Ceremonial (FSC) fisheries in both freshwater and marine environments. This should also be extended to include all Indigenous communities, including those located in neighbouring provinces, that may be impacted by the project construction or operation, such as those that hold FSC or commercial communal fishing licences in the area of the project.

Section 3.3, Project Design and Components

DFO suggests that all aspects of the physical construction activities be outlined in detail including any temporary structures such as access roads for construction and the disposal location for any proposed dredge materials. Scheduling information for all phases and proposed mitigation should also be provided.

Section 4.0 Regulatory Environment:

DFO recommends that the language around section 82 of the *Impact Assessment Act* in this section be updated with the suggested text below:

“A review under Section 82 of the federal *Impact Assessment Act* (the Act) to determine whether significant adverse environmental effects from components of the project on federal lands is required before Federal Authorities involved can exercise any power, perform any duty or function, or provide financial assistance to enable the project to proceed. Therefore the Federal Authorities may require the consideration of additional factors which may not be covered in the Provincial Environmental Assessment to fulfill their obligations under Section 82 of the Act. The Proponent is encouraged to consult the Act to determine any additional obligations under Section 82 .”

Section 8.0 Assessment Methodology

DFO suggests that the Terms of Reference provide clarity to the proponent with regard to the assessment methodology and instruction to develop a clear definition of adverse effects and significant environmental effects for each Valued Component.

DFO also suggests that should the proponent plan to apply offsetting as a mitigation to determine significance, the proponent be required to provide a preliminary offsetting plan, developed in consultation with affected First Nations and other resource users as part of the EA documentation.

DFO also recommends that analysis for any potential impacts related to the physical construction activities and potential impacts from the effluent be assessed separately.

Section 9.2.4 Wetlands

Wetlands may support fish both directly and/or indirectly, DFO recommends that any wetlands potentially impacted by project activities also be evaluated for potential impacts to fish and fish habitat.

Section 9.4.2 Freshwater Aquatic and Marine Environment

DFO recommends that the terms of reference provide further clarification on the definitions of fish and fish habitat and aquatic species at risk such that the EA report assesses any changes to the “fish and fish habitat” as defined in subsection 2(1) of the *Fisheries Act*.

Section 10 Adverse Effects and Environmental Effects Assessment

DFO recommends that the proponent review guidance for assessment methodology and thresholds of significance related to the *Impact Assessment Act*.

The statement “Where impacts to fish habitat cannot be avoided or mitigated discuss compensation measures to ensure that impacts are offset” should be clarified to ensure that offsetting measures are related to a physical activity as outlined in the Fish and Fish Habitat Protection Policy Statement, August 2019 as opposed to monetary compensation.

Section 11 Proposed Mitigation

Clarification should be provided in this section in relation to offsetting impacts to fish and fish habitat, financial compensation, or other accommodations.

As indicated above, DFO notes that if offsetting impacts to fish and fish habitat is included as a mitigation then a preliminary offsetting plan should be provided, developed in consultation with any potentially impacted First Nations or other resource users.

Section 12 Residual Effects and Environmental Effects

If possible, this section should refer to the Impact Assessment Agency’s guidance on determining whether a project is likely to cause significant or adverse environmental effects. The TOR could highlight that there are additional federal requirements as per section 82 of the *Impact Assessment Act*, and that the proponent should consider these requirements when assessing residual effects and determining significance.

Section 15.2 Consultation with the Mi’kmaq of Nova Scotia

DFO will be undertaking consultation with the Mi’kmaq of Nova Scotia led by Pictou Landing First Nation and potentially Indigenous communities outside Nova Scotia. DFO will continue to coordinate consultation with the province of Nova Scotia, to the extent possible. There is a federal commitment to ensure respect for the rights of Indigenous peoples of Canada as recognized and affirmed by section 35 of the Constitution Act, 1982; to fostering reconciliation and working in partnership with Indigenous communities as well as implementing the United Nations Declaration on the Rights of Indigenous Peoples. DFO will require the proponent to provide information through the assessment process that can assist the department with undertaking these important commitments.

Please note that DFO has previously provided a number of technical comments during the review of the documents submitted for the proposed project in relation to DFO's mandate. There is an expectation that these comments will be considered in the development of any future reports submitted by the Proponent.

If you have any questions or comments, please contact me at our Dartmouth office at
or by email at [@dfm-mpo.gc.ca](mailto:dfm@dfm-mpo.gc.ca).

Yours sincerely,

A/Manager
Regulatory Reviews – Ecosystem Management

cc: _____, Pictou Landing First Nation



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Environmental Protection Branch
16th Floor Queen Square
45 Alderney Drive
Dartmouth, NS B2Y 2N6

February 7, 2020

Nova Scotia Environment
1902 Barrington Street, Suite 2085
Halifax, NS B3J 2P8

Dear :

Re: Northern Pulp Replacement Effluent Treatment Facility Project – Draft Terms of Reference for the Preparation of an Environmental Assessment Report

In response to your January 8, 2020 request, Environment and Climate Change Canada (ECCC) has reviewed the Draft Terms of Reference (TOR) for the preparation of an Environmental Assessment Report for the Northern Pulp Replacement Effluent Treatment Facility Project. The attached comments are offered for your consideration in finalizing the TOR.

The department's review focused on issues within our mandate and available expertise involving potential project interactions with migratory birds and species at risk as well the potential need for the department to issue a Disposal at Sea Permit in relation to the construction of the marine pipeline and effluent discharge structure.

We note that for relevant portions of the Draft TOR, the proponent is directed to consider the issues raised in the department's submissions on the Environmental Assessment Report and the Focus Report and, to consult with relevant government departments as part of the collection of baseline data, designing modeling and receiving water studies, and development of mitigation and monitoring programs. The department is prepared to continue working with the province, the proponent and other departments in this regard.

Also, as described in the Draft TOR, ECCC may be required to undertake a review along with other federal departments under Section 82 of the *Impact Assessment Act*. The proponent is encouraged to consider the advice in the attached comments and consult with ECCC, the province and other federal departments to help identify the most timely and efficient means of managing the information requirements for all of the respective regulatory and environmental assessment processes.

If you have any questions or concerns, please feel free to contact me, or
EA coordinator for this project.

lead

Yours truly

Head, Environmental Assessment
Environmental Protection Operations Directorate, Atlantic

cc:

**Northern Pulp Replacement Effluent Treatment Facility Project Environmental
Assessment Report – Draft Terms of Reference
Environment and Climate Change Comments, February 7, 2020**

Section 3.0 Project Description

3.4 Construction

Describe the construction of all Project components and supporting infrastructure. This will include but not be limited to:

- **Dredge management /disposal plans that characterize and quantify marine sediments to be dredged and disposed (or re-used) in accordance with Environment and Climate Change Canada (ECCC) standards and in consultation with relevant government departments. Identify areas where dredging activities will occur and identify the location, quantity and chemistry of any dredge materials that are expected to require land-based disposal.**

ECCC Comments:

It is recommended this also include the identification of any marine disposal sites including permanent side cast and open water locations.

ECCC also notes that based on the sediment data submitted in support of the Focus Report, additional sampling and analysis will be required along certain sections of the marine pipeline route. This is required even if the proponent intends to exclusively re-use the trenched material as cover (i.e. there is no excess material remaining). ECCC should be consulted to discuss these requirements in further detail.

Section 4.0 Regulatory Environment

Describe the existing regulatory environment (Federal, Provincial and Municipal) including all permitting, licensing and regulatory requirements that apply to all phases of the Project and associated infrastructure. Provide a schedule indicating anticipated dates for required regulatory approvals.

Significant portions of the proposed Project to be evaluated by the EA Report are located on federal lands; therefore, federal authorities have indicated that they must make a determination as to whether the Project is likely to cause significant adverse effects and/or in the case of Public Services and Procurement Canada (PSPC) seek an Order in Council prior to providing authorizations, licenses, or leases. To ensure potential environmental effects are addressed to the satisfaction of federal authorities under Section 82 of the

***Impact Assessment Act*, provide all necessary authorizations, licenses, or leases for all applicable federal authorities.**

ECCC Comment:

ECCC has consulted with the other departments likely to be involved in a Section 82 review under the *Impact Assessment Act* and have proposed the following language for consideration:

A review under Section 82 of the federal *Impact Assessment Act* (the Act) to determine whether significant adverse environmental effects from components of the project on federal lands is required before Federal Authorities can exercise any power, perform any duty or function, or provide financial assistance to enable the project to proceed. Therefore, the Federal Authorities may require the consideration of additional factors which may not be covered in the Provincial Environmental Assessment to fulfill their obligations under Section 82 of the Act. The Proponent is encouraged to consult the Act to determine any additional obligations under Section 82.

**Section 6.0 Description of Alternatives to the Project and,
Section 7.0 Other Methods of Carrying out the Project**

Include an analysis of alternative means of carrying out the Project; describing functionally different ways to meet the Project need and achieve the Project purpose.

Discuss other methods for meeting the need for the Project, including but not limited to, pipelines and treatment technologies. This section shall also discuss alternate locations for the project.

The rationale for rejecting other described methods of carrying out the Project must be provided including a discussion of how environmental sustainability and impact avoidance criteria were applied.

ECCC Comment:

If the disposal of excess trenched material at sea remains a possibility and, if the proponent wishes to utilize the EA Report to the extent possible to satisfy the *Impact Assessment Act* Section 82 review discussed Section 4.0 and the Disposal at Sea regulatory requirements, then the following additional information will be needed regarding alternatives to disposal and alternative disposal methods:

- Consideration of reduction/reuse opportunities of excess sidecast material
- Consideration of disposing excess sidecast material on land vs. at sea
- Consideration of alternative disposal at sea options (sidecast vs. open water disposal)

Section 9.0 Existing Environment

9.4 Flora and Fauna

Identify flora, fauna, and habitat types that will be intersected by all components of the Project. Appropriate field surveys agreed to by Nova Scotia Lands and Forestry (NSLAF) – Wildlife Division, shall be conducted as part of the evaluation. Surveys should be described by results, methodology, and spatial and temporal boundaries.

ECCC Comment:

For clarification, “flora” by definition does not include lichens. ECCC suggests that lichen assessments for all species covered by the NS At-Risk Lichens SMP might be considered (https://novascotia.ca/natr/wildlife/habitats/terrestrial/pdf/SMP_BFL_At-Risk-Lichens.pdf)

9.4.1 Terrestrial Environment

(Bullet 8, p.21)

- **[Conduct] Bird baseline study for Common Nighthawk (*Chordeiles minor*), including rationale for survey point selection to the satisfaction of NSLAF.**

ECCC Comment:

ECCC requests that the proponent conduct Common Nighthawk surveys using established protocols during the breeding season.

Section 10.0 Adverse Effects and Environmental Effects Assessment

10.2.3 Marine

The proponent is encouraged to consult with relevant government departments when determining the need for, extent, methods, and timing of site-specific studies/surveys. In conducting the effects assessment on marine resources, the EA Report must identify and evaluate, to the satisfaction of relevant departments:

- **Marine pipeline construction methods along the full route and construction requirements (e.g. blasting) using results from geotechnical investigations**

ECCC Comment:

ECCC recommends this include consideration of any disposal (or re-use) activities that are part of pipeline construction.

ECCC recommends that all sediment sampling results be referenced in the effects assessment along with the results of geotechnical investigations.

10.4 Flora and Fauna

10.4.2 Freshwater Aquatic and Marine Environment

Evaluate the potential effects on aquatic environments, including fish and fish habitat.

While considering the effects that the project may have on freshwater and marine species, include a full account of species at risk or of concern and significant habitats. This section must include activities that may affect avifauna in the aquatic environments.

ECCC Comment:

ECCC recommends the marine benthic invertebrates (e.g. polychaete worms, mussel spat, small clams) be included in the bioaccumulation/biomagnification assessment of the discharge plume. This will help assess the potential impact of biomagnification on migratory birds such as shorebirds.

Section 11 Mitigation

11.4 Flora and Fauna

11.4.1 Terrestrial Environment

... based on concerns raised by government reviewers during the review of the EARD and the Focus Report, the EA Report must also include, but not be limited to the following additional items:

b) mitigation and monitoring plan for the Eastern Wood-Pee wee (*Contopus virens*, SARA Special Concern, NSESA Vulnerable) and Barn Swallow (*Hirundo rustica*, SARA Threatened, NSEA, Endangered) found during the course of filed surveys and Kildeer (*Charadrius vociferous*) identified to be likely breeding in the Project area, in consultation with both ECCC and NSLAF.

ECCC Comment:

In addition to the two species identified, ECCC recommends that additional species at risk be considered in the required mitigation and monitoring program. This should include consideration of impacts to other at-risk landbirds (e.g. Evening Grosbeak, Bobolink, Canada Warbler) as well as at-risk bats and invertebrates.

Environmental Health Program (EHP) Atlantic Region
Regulatory Operations and Enforcement Branch
Suite 1625, 1505 Barrington Street
Halifax, NS B3J 3Y6

February 7, 2020

Environmental Assessment Branch
Nova Scotia Environment
1903 Barrington Street, Suite 2085
PO Box 442
Halifax, Nova Scotia, B3J 2P8

Subject: Health Canada's Response to the *Draft Terms of Reference for the Preparation of An Environmental Assessment Report for Public Review and Comment Regarding the Replacement Effluent Treatment Facility Project Proposed by Northern Pulp Nova Scotia Corporation*.

Dear :

Thank-you for your e-mail dated January 8th, 2020 requesting Health Canada's review of the "*Draft Terms of Reference for the Preparation of An Environmental Assessment Report for Public Review and Comment Regarding the Replacement Effluent Treatment Facility Project Proposed by Northern Pulp Nova Scotia Corporation*" for issues with respect to human health.

Health Canada is providing the following comments for your consideration:

#1 Document Reference:

Section 10.0- Adverse Effects And Environmental Effects Assessment: "...Full hazard identification and qualitative risk assessment associated with Project construction and operation, including those which have or may have an environmental impact (directly or indirectly)..."

Health Canada Comments:

A quantitative Human Health Risk Assessment (HHRA) is recommended by Health Canada guidance if the problem formulation stage of the HHRA predicts elevated Contaminants of Potential Concern (COPCs) in one or more environmental media for the proposed project, and for projects with operational pathways & a potential for human exposure to contaminants. Please refer to Health Canada's *Guidance for Evaluating Human Health Impacts in Environmental Assessments: Human Health Risk*, Section 6 for further details.

#2 Document Reference:

Section 10.6 - Include monitoring and mitigation measures for elevated COPCs in air emissions in HHRA problem formulation.

Health Canada Comments:

As only the problem formulation for an HHRA was completed in the Focus Report, monitoring and mitigation measures for elevated COPCs were not identified. In addition to air emissions, COPCs may also be elevated in water, country food, soil, sediment etc., therefore consider rewording the TOR to reflect the following:

Should the completed HHRA identify risks to human health, it is recommended that the HHRA be refined to reduce uncertainty and/ or that mitigation measures are identified that would help to reduce human exposure to COPCs. Please refer to Health Canada's *Guidance for Evaluating Human Health Impacts in Environmental Assessments: Human Health Risk* for further details.

#3 Health Canada Comments:

In reference to comment #13(d) provided by Health Canada on the review of the Focus Report:

In addition, the elevated temperature of the effluent and the potential for nutrient loading may pose bacteriological risks to bathers. The two provincial parks in the near vicinity of the marine portion of the project have beaches and a beach is located in Pictou Landing First Nation which is utilized by the people of that community. Bacteriological risks associated with the effluent for recreational water users was not evaluated in the HHRA problem formulation report or the Focus Study. Evaluation of this risk should be completed and monitoring and mitigation measures should be identified as applicable.

The draft Terms of Reference does not address bacteriological risks to recreational water users. As the elevated temperature of the effluent and the potential for nutrient loading has the potential to affect bacteriological water quality, monitoring and mitigation measures should be identified in the Environmental Assessment Report, as applicable.

#4 Health Canada Comments:

Due to the potential impact to country/traditional foods from this project, please refer the proponent to the following for further guidance:

Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Country Foods. Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario

#5 Health Canada Comments:

Due to the potential impact to recreational water, in addition to Health Canada's Guidance for Evaluating Human Health Impacts in Environmental Assessment: Water Quality, please refer the proponent to the following guidance in the draft TOR:

Health Canada (2012). Guidelines for Canadian Recreational Water Quality, Third Edition. Water, Air and Climate Change Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

If you have any questions, please contact the undersigned at your convenience.

Sincerely,

Regional Environmental Assessment Specialist
Health Canada, Atlantic Region
Ph:

@canada.ca



Public Services and Procurement Canada
1713 Bedford Row
Halifax, Nova Scotia
B3J 3C9

February 7, 2020

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

Dear

Re: Public Services and Procurement Canada: Comments on the Draft Terms of Reference for the Environmental Assessment Report for the Replacement Effluent Treatment Facility Proposal- Northern Pulp Nova Scotia

Please accept Public Services and Procurement Canada (PSPC) review comments on the above referenced document for your consideration.

Context

Public Services and Procurement Canada has reviewed the Province of Nova Scotia draft terms of reference for an environmental assessment report (EAR) in relation to the replacement effluent treatment facility (RETF) being proposed by Northern Pulp Nova Scotia (NPNS). As custodian for the potentially affected portion of the federal seabed, PSPC may at some point be asked to provide the proponent with a lease or licenses to construct and operate the effluent pipeline on federal lands. In order to consider such an application, the Department would first need to make a project effects determination pursuant to the federal Impact Assessment Act (IAA). In particular, should PSPC become a Federal Authority pursuant to the IAA, PSPC would need to assess the likelihood of significant impacts occurring as a result of the project, and whether or not any such impacts could be mitigated.

PSPC will rely in part on the information provided during the provincial environmental assessment process to meet related information requirements. Accordingly, PSPC is providing input on the draft terms of reference in the interests of assisting our provincial colleagues in their efforts to conduct a fulsome and efficient environmental assessment of the proposal. The Department is also providing comments in order to inform both the Province and NPNS of potential federal information requirements should PSPC be triggered at some point as a Federal Authority pursuant to IAA.

Specific Comments on the TOR

- *Section 3.3 2nd bullet of marine based section of Pipeline route:*

“.....the major existing infrastructure, adjacent land uses that will intersect with the pipeline route and important environmental features.....suggest removing the word “important” as it is subjective.

- *Section 4.0 Under “Regulatory Environment, 2nd paragraph, last sentence, page 15:* The document currently states: “To ensure potential environmental effects are addressed to the satisfaction of federal authorities under Section 82 of the Impact Assessment Act, provide all necessary authorizations, licenses, or leases for all applicable federal authorities.”

Suggested wording change: “A review under Section 82 of the IAA to determine whether significant adverse environmental effects from components of the project on federal lands is required before involved Federal Authorities involved can exercise any power, perform any duty or function, or provide financial assistance to enable a project to proceed. Therefore the Federal Authorities may require the consideration of additional factors which may not be covered in the Provincial Environmental Assessment. The Proponent is encouraged to consult Section 82 of the IIAA to determine any additional obligations.

- *Section 8.0 Assessment Methodology – Second bullet:*

This should include local and regional study areas and the rationale on how their spatial boundaries were determined. Cumulative effects of the project should also be assessed

- *Section 9.1.2.-Second paragraph, page 18: Suggest adding additional paragraph(s) reflecting the following:*

Marine geotechnical survey results provided by the Focus Report included investigative and analytical results pertaining to ice scour. The survey report stated that dredging constraints may present themselves in certain areas along the Caribou pipeline route component due to sub-bottom geographical features (i.e. bedrock depth). In particular, the report indicated that some uncertainty exists with regard to the determination of bedrock depth owing to the coarse nature of overlying glacial till in three areas, mostly located in the areas of highest ice scouring. The report also indicated that a 70x100 meter patch in the near shore area west of Munroes Island shows sea bottom disturbances likely due to “ice grounding”.

The survey results include the statement: “the ice scour depth parameter is perhaps the most important measurement in estimating the minimum trenching depths required for a pipeline installation”. PSPC is of the opinion that risk factors associated with trenching and burying the pipe vs. laying on the surface of the ocean floor and covering are not the same, particularly with regard to potential impacts from ice scour. PSPC would require confirmatory survey analyses of bedrock depths in these areas. The Department would also require an additional ice scour survey to be carried out immediately following spring break up, 2020. Results will need to be accounted for in the final pipeline design and associated impact assessment elements.

- *Section 9.2.3 Marine Water:*

Provide a minimum of two years of baseline information to account for yearly variations.

Marine sediment baseline sampling to include contaminants of potential concerns associated with marine construction or the treated effluent.

- *Section 9.4. Flora and Fauna, first sentence: end with:*

“Identify flora, fauna and habitat types that will be intersected by all components of the project - suggest inserting “or potentially impacted by the project”.

- *Section 9.6. Socio-Economic Conditions:*

The spatial boundaries in this section should be expanded to include the fishing industry, forestry industry etc. Studies need to assess both positive and negative impacts.

- *Section 9.7. Second paragraph:*

Reference is made to requirement for a Mi'kmaq Ecological Knowledge Study (MEKS). Federal requirements as provided for by the IAA provide for an arguably broader scope of investigation in this regard, referring to "Indigenous Knowledge" (not just ecological knowledge), and "community knowledge". Other factors included by the IAA include potential impacts on (such items as) health, social, economic and use rights. PSPC considers the accommodation of Indigenous concerns associated with the project to be paramount in terms of importance. In this regard, it is expected that the company would develop a set of terms of reference specific to Indigenous issues and consult with the Indigenous community with regard to scope prior to undertaking related studies. The Indigenous community should also be engaged and validate study results prior to finalization, including the MEKS. Informational outcomes would be critical respecting the development of any federal environmental effects determinations related to permitting, licensing, leasing or authorizations.

- *Section 9.8. Last sentence:*

Add "...and involved federal departments".

- *Section 10.5. Second paragraph, second sentence. Add:*

Include appropriate invertebrates and lower trophic level test organisms and assess the potential for bioaccumulation for all test animals.

- *Section 10.7*

Identify the potential impact on the current use of land and resources for traditional purposes and any Aboriginal specific land claims within the study area. – This should also include marine environments

- *Section 14.5. Other Monitoring Plans*

Add a requirement for the development of mitigation monitoring plans for all proposed mitigation.

Sincerely,

Original signed by:

Nova Scotia Operations Manager
Public Service and Procurement Canada
Environmental Services
Atlantic Region



February 7, 2020

P.Geo.
Contaminated Sites Specialist
Nova Scotia Environment

Thank you for the opportunity to review and comment on the Environmental Assessment Draft Terms of Reference for the proposed Northern Pulp Replacement Effluent Treatment Facility Project in Pictou, Nova Scotia.

As Transport Canada has previously noted, the proponent will need to apply for a *Canadian Navigable Waters Act* (CNWA) approval. Additionally, the proponent may be required to apply for a lease or license, should the plan be for the effluent pipeline to cross at or near Transport Canada lands at the Caribou Ferry Terminal. To date, neither of these applications has been received.

The Department has consulted with other Federal Authorities also involved in this project and we suggest the following wording for the second paragraph in Section 4.0 Regulatory Environment:

A review under Section 82 of the federal *Impact Assessment Act* (the Act) to determine whether significant adverse environmental effects from components of the project on federal lands is required before Federal Authorities involved in the project can exercise any power, perform any duty or function, or provide financial assistance to enable the project to proceed. Therefore the Federal Authorities may require the consideration of additional factors which may not be covered in the Provincial Environmental Assessment to fulfill their obligations under Section 82 of the Act. The Proponent is encouraged to consult the Act to determine any additional obligations under Section 82.

Lastly, it should be noted that where the potential effects on navigation or navigable waters are mentioned in the draft Terms of Reference (see subsections 10.5, 10.8, and 11.7), an assessment of these effects, including any navigation related effects identified through consultation with the Mi'kmaq of Nova Scotia, will be undertaken as part of the Proponent's application for CNWA approval. Direct effects on navigation are mitigated by way of terms and conditions incorporated into any approval issued pursuant to the CNWA.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

, M.Sc.
Regional Senior Environmental Supervisor

Date: February 4, 2020

To: Nova Scotia Environment

From: The Department of Business

Subject: Draft terms of reference for the preparation of an Environmental Assessment Report for the Northern Pulp Effluent Treatment Facility

The mandate of the Department of Business (DOB) is to lead and align provincial government efforts behind a common agenda for inclusive economic growth. This mandate focuses on strategic priorities and opportunities that encourage Nova Scotia's innovation, competitiveness, entrepreneurship, and export orientation.

Fulfilling this mandate involves working collaboratively with our Crown corporations (Develop Nova Scotia, Halifax Convention Centre Corporation (Events East Group), Innovacorp, Invest Nova Scotia, Nova Scotia Business Inc. and Tourism Nova Scotia), key partners in other levels of government, entrepreneurs, large businesses, post-secondary institutions, venture capital investors and Nova Scotians.

In March 2019, DOB provided comments on the Environmental Assessment Registration Document (EA) submitted by Northern Pulp Nova Scotia Corporation for the replacement of their effluent treatment facility.

The March 2019 decision by the Minister of Environment on the proposed effluent treatment plan replacement required Northern Pulp Nova Scotia Corporation to complete an EA Focus Report to better understand the potential for adverse effects or significant environmental effects.

The EA Focus Report required by the Minister of Environment responded to the concerns raised by DOB during the review of the EA Registration Document. DOB reviewed the EA Focus Report submitted by Northern Pulp Nova Scotia Corporation in October 2019 and had no further comments.

On December 17, 2019, the Minister of Environment made the decision to require the company to complete an EA Report. DOB feels the EA Report required by the Minister of Environment will respond to the concerns raised by DOB during the review of the EA Registration Document.

DOB has reviewed the proposed draft terms of reference for the preparation of an Environmental Assessment Report and has no comments.

Date: February 7, 2020

To: , Department of Environment

From: Department of Lands and Forestry

Subject: Draft Terms of Reference for the Environmental Assessment Report
Regarding the Replacement Effluent Treatment Facility Project.

Scope:

This Draft Terms of Reference is based on the proposed Project as described in the February 2019 Environmental Assessment Registration Document and in the subsequent October 2019 Focus Report. Northern Pulp has been asked to prepare an Environmental Assessment Report addressing the deficiencies in information provided to date through the environmental assessment process and which fulfills the intent of the Terms of Reference. The Environmental Assessment Report must consider all the effects that are likely to arise from the Project, including any not explicitly identified in the Terms of Reference.

Documents Reviewed:

The following document and associated appendixes were consulted as part of this review: *Nova Scotia Environment. January 8, 2020. Draft Terms of Reference for the Preparation of an Environmental Assessment Report for Public Review and Comment, Regarding the Replacement Effluent Treatment Facility Project Proposed by Northern Pulp Nova Scotia Corporation. 37pp.*

Comments:

The Department of Lands and Forestry provides the following comments for consideration of inclusion in the final Terms of Reference:

- Page 16, add: **Provide reviewers spatial files of the project area boundaries.**
- Page 19, *Evaluation of the wetlands shall include wildlife habitat potential (including rare and endangered species) **and use**,*
- Page 20, Section 9.4.1 Terrestrial Environment. Discussions of old growth forest should also be done in consultation with the Forestry division of the Department of Lands and Forestry, as they can provide this information.
- Page 21, Section 9.4.1 Terrestrial Environment. Definitions of sensitive fauna

and species-at-risk should be provided for clarity in the process. The following definition should be used and is derived from *Nova Scotia Environment. 2009. Guide to Addressing Wildlife Species and Habitat in an EA Registration Document. 9pp.*: **Priority species are identified as follows: 1) Species identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as at risk, and species listed under the Federal Species-at Risk Act. 2) Species listed under the Nova Scotia Endangered Species Act. 3) Species designated as Species of Conservation Concern (Red or Yellow) by the Nova Scotia General Status of Wild Species (S1, S2, or S3 or any combination thereof as defined by the ACCDC)).**

- Page 21, Section 9.4.1 Terrestrial Environment.
Bird surveys transects to provide a complete view of bird species distribution and habitat use along the pipeline route, including transect bird surveys and fall migratory bird survey, identification of nests of bird species which are protected under the Wildlife Act, regardless of whether they are active or not must also be considered;
This may be better described by rewriting as the following:
Bird survey transects to provide a complete view of bird species distribution and habitat use along the pipeline route, which may require additional bird surveys. Fall migratory bird surveys are required. Identification of nests of bird species which are protected under the Wildlife Act, or with respect to certain species, protected under the Migratory Bird Convention Act, regardless of whether they are active or not must also be considered;
- Page 21, Section 9.4.1 Terrestrial Environment. Add: ***Detailed description of survey methodology and site selection is required in order to properly assess the validity of survey results, including surveys that were already completed as part of previous submissions.***
- Page 22, 9.4.4 Freshwater Aquatic and Marine Environment. Use of the phrase “critical habitat” should be clarified. Is this referring to federally identified Critical Habitat for Endangered and Threatened species? If it is not, terminology should be changed to avoid confusion.
- Page 26, 10.2.4 Wetlands. The following should also be included in the effects assessment: ***Impacts to wildlife and wildlife habitat as a result of wetland specific construction activities.***
- Page 28. 10.4.1 Terrestrial Environment. Potential effects on flora and fauna and avifauna species/communities during all phases of the project, should also include ***the risk and potential impacts associated with a pipeline rupture or spill at any point along the pipeline route, including wetland crossings.***
- Page 32, 11.4.1 Terrestrial Environment. *Discuss commitments to provide contingency and remediation plans for impacts to terrestrial habitat as a result of accidental events at all stages of construction and operation.*
- Page 32, 11.4.1 Terrestrial Environment. a) *mitigation measures that will be taken to avoid destroying rare priority species and associated habitat detected in the 2019 floristic surveys.*
- Page 32, 11.4.1 Terrestrial Environment. In addition to Eastern Wood-pewee and Barn Swallow, Common Nighthawk (*Chordeiles minor*, SARA Threatened, NSESA Threatened) was identified during 2019 field surveys and a mitigation and monitoring plan will need to be developed to address this species, along with

any other species at risk likely to found in the project area.

- Page 33, 11.4.1 Terrestrial Environment. The following should be added:
 - h) mitigation measures for non-migratory bird species protected under the Wildlife Act and the Endangered Species Act;***
 - i) measures to avoid creating temporary or artificial habitat(sandpits) during construction that may encourage turtle nesting; and operation of the replacement facility and pipeline to reduce adverse impacts of light, noise, and dust on wildlife and wildlife habitat.***
 - j) standards or BMPs to avoid entrapment of wildlife as a result of construction activities (i.e. trenching).***
- Page 33, Section 11.4.2 *Describe the measures that will be taken to minimize or avoid the introduction of non-native species to the area.*
- Page 35, Section 14.4 - add before heading on Human Health:
Discuss wetland post construction monitoring; describe activities for post construction monitoring that may include repairs, vegetation management, and necessary monitoring mechanisms (i.e. lighting)

Date: February 5, 2020.

To: , Nova Scotia Environment

From: , Consultation Division
Nova Scotia Office of Aboriginal Affairs

Subject: **Replacement Effluent Treatment Facility Project**

The Nova Scotia Office of Aboriginal Affairs (OAA) has reviewed the EA Report draft Terms of Reference for the proposed Replacement Effluent Treatment Facility by Northern Pulp Nova Scotia, dated January 2020. The following review considers whether the information required under the draft Terms of Reference will assist the Province in assessing the potential of the proposed project to adversely impact established and/or asserted Mi'kmaq Aboriginal and Treaty Rights.

Section 15.0 CONSULTATION PROGRAM (page 36)

Section 15.2 Consultation with the Mi'kmaq of Nova Scotia

The first paragraph should reference adverse impacts to established or asserted Mi'kmaq Aboriginal and Treaty Rights. Recommend first sentence be changed to:

"To assist the provincial Government in their consultation process with the Mi'kmaq of Nova Scotia, the EA Report must describe all steps taken by the Proponent to identify the concerns of Mi'kmaq of Nova Scotia about the adverse effects or environmental effects of the Project as well as any adverse impacts to established or asserted Aboriginal and Treaty Rights."

Recommend second sentence of first paragraph be changed to:

"It shall provide a summary of all concerns expressed by the Mi'kmaq of Nova Scotia, including any adverse impacts to established or asserted Aboriginal and Treaty Rights and all steps taken by the Proponent to address or accommodate these concerns and impacts. Moreover, the EA Report must describe any outstanding concerns."

Regarding the section on distribution of information to the Mi'kmaq of Nova Scotia, recommend the first sentence of the third paragraph be changed to:

"The EA Report will also provide details of efforts made to distribute Project information and provide a description of the information and materials distributed, the date they were distributed, and the method used to distribute them, to inform the Mi'kmaq of Nova Scotia."

Regarding the proponent engagement section, recommend changing the first sentence

Agriculture

Date: February 7, 2020

To: , Nova Scotia Environment

From: Executive Director, Policy and Corporate Services, Nova Scotia
Department of Agriculture

Subject: Northern Pulp ETF Project - EA Report Draft Terms of Reference

Thank you for the opportunity to review the Northern Pulp ETF Project - EA Report Draft Terms of Reference document.

The Nova Scotia Department of Agriculture has no new additional terms to add at this time.

Date: February 7, 2020.

To: , Nova Scotia Environment

From: , Curator of Archaeology
Communities, Culture, and Heritage

Subject: **Replacement Effluent Treatment Facility Project**

Page 23, 9.8 Archaeological Resources

Twice the word “features” is used in this paragraph. Please change to “features and/or artifacts”.

Page 30, 10.9, Archaeological Resources

Please include the use of the ARIA. Change wording to “As part of an archaeological resource impact assessment process, evaluate the potential effects of any changes.....”.

Recommended addition to the second sentence given PLFN is leading the Consultation. Change to “In conducting the effects assessment on archaeological resources, it is recommended that the Proponent consult with CCH, Pictou Landing First Nation and the KMKNO-ARD”.

Page 34, 11.8, Archaeological Resources

Please change to “Describe mitigation measures and recommendations to preserve, protect, or recover...”.

Fisheries and Aquaculture

Date: February 7, 2020

To: , Nova Scotia Environment

From: Executive Director, Policy and Corporate Services, Nova Scotia
Department of Fisheries and Aquaculture

Subject: Northern Pulp ETF Project - EA Report Draft Terms of Reference

Thank you for the opportunity to review the Northern Pulp ETF Project - EA Report Draft Terms of Reference document.

The Nova Scotia Department of Fisheries and Aquaculture has no new additional terms to add at this time.

Date: February 7, 2020
To: Department of Environment
From: Department of Municipal Affairs & Housing
Subject: **Northern Pulp Effluent Treatment Facility Terms of Reference for the Environmental Assessment Report**

As requested, the Department of Municipal Affairs and Housing has reviewed the Environmental Draft Terms of Reference for the proposed Northern Pulp Effluent Treatment Facility.

Consultation with municipalities is one of the Department's areas of mandate. We would like to ensure that the proponent undertakes adequate consultation with municipalities in the vicinity of the undertaking or where the undertaking is located in order to confirm conditions for compliance with municipal planning policies and by-law provisions. Explicitly listing municipalities in Sections 9.7, 10.8, 11.7 and 15 would help ensure adequate consultation will occur.

Thank you for the opportunity to review the Registration Documents for the above-noted project. Should you require additional information, please contact the Department.

c: Planner, DMAH

Date: February 7, 2020

To: Nova Scotia Environment

From: , Chief Engineer

Subject: Northern Pulp Nova Scotia Corporation (NPNS) Environmental Assessment Report Draft
Terms of Reference for the Replacement Effluent Treatment Facility Project

Dear ,

TIR staff have reviewed and prepared the attached comments on the Environmental Assessment Report Draft Terms of Reference for the Replacement Effluent Treatment Facility Project of Northern Pulp Nova Scotia Corporation (NPNS).

Sincerely,

Chief Engineer

Comments on Design Drawings

1. Section 3.3 “Land-Based Sections of Pipeline Route” should include that design drawings of proposed pipeline alignment within current highway right-of-way must show sufficient detail in legend, plan, profile, and cross-sections at regular intervals and key locations, at an appropriate scale including but not limited to: dimensions of pipe and trench/thrust pit excavation limits from adjacent key features e.g. utilities & municipal infrastructure, structures/foundations, original ground surface, edge of asphalt, edge of shoulder, top/bottoms of cut/fill slopes, current/proposed right-of-way boundaries, intersecting roads, etc. Also, the location/limits of air release valve(s) and any corresponding enclosure structures and access provisions to/from adjacent highway.

Section 3.2 Project Description: Project Location

1. Section 3.2 requires the proponent to “provide details of existing agreements to develop the project on lands not owned by the proponent and to provide detailed plans for the required acquisition or use of private and crown lands and discuss contingencies should these lands not be available.” This section should also include identifying any easements required to maintain access to adjacent private lands. Also, TIR’s review and acceptance of alignment and design details (see previous comments on design drawings) may be required before this can be finalized.

Section 3.3 Project Description: Project Design and Components

1. “Land-Based Sections of Pipeline Route” (page 13) required risk assessment should ensure this considers future construction/maintenance activities that may be undertaken by TIR or others e.g. ditching, culvert replacement, roadside brush cutting, future highway twinning, installation of underground and/or overhead utilities or municipal services etc.
2. “Marine Based Sections of Pipeline Route” (page 14) should also require consideration of impacts that plans for dredging to install pipe below the seabed immediately adjacent to the Harvey A. Veniot causeway may have on stability/settlement of the causeway structure.

Section 3.4 Project Description: Construction

1. Section 3.4 should also require plans to outline/show work plans (including construction access locations) that address traffic operational constraints and requirements TIR has previously communicated to the proponent as conditions for consideration of construction within current ROW e.g. lane closures or stoppage of traffic on Highway 106 for construction or future maintenance not permitted for any significant length of time, trenchless technology and sleeving required to cross below active roadways/structures and facilitate future pipe maintenance/replacement etc.

Section 10.8 Adverse Effects and Environmental Effects Assessment: Existing and Planned Land Uses

1. Section 10.8 states “discuss the anticipated changes in traffic density and patterns during all phases of the Project including its effect on transportation”. Any traffic impacts due to the project need to have proper mitigation measures to minimize impact on existing traffic. Any new construction traffic created as a result of this project needs to be mitigated as well. Any road closures, traffic diversions, or proposed speed limit changes, would need to be analyzed and approved by the Department.

Section 11.7 Proposed Mitigation: Existing and Planned Land Uses

1. Section 11.7 states “Discuss the mitigation measures planned to address anticipated impacts from any predicted changes in traffic speed, traffic routes, marine navigation, exclusion zones and density in adjacent residential and commercial areas”. I am assuming this is closely related to the extract from the report stated in Section 11.6 of the EA Report Draft.

General Comments on EA Report Draft TOR

1. Plans to have the pipeline in the HROW on Hwy 106 would require approval by the Department and would require a Working-Within-Highway-Right-Of-Way Permit and meet any necessary Departmental specifications. If there are private properties involved, permission would need to be obtained from any private property owners. This would also apply to any new accesses that are created on provincially owned roads.
2. An approved TIR Work Within Highway Right-of-Way Permit with all required terms, conditions, agreements and refundable/non-refundable security deposits in place is required before any construction can commence within TIR highway right-of-way or within 100 meters of the highway centerline and/or 60 meters from the ROW boundary as per the Public Highways Act.
3. If there are any work areas that are created on a provincially owned road, these work areas will need to be compliant with the appropriate section of the Nova Scotia Temporary Workplace Traffic Control Manual.
4. If there are changes to signage or pavement markings, or any road closures that are required, they would need to be approved through the local Departmental staff.
5. If there are requirements to move overweight/oversize items, this may trigger the requirement for a Special Moves Permit. The proponent is encouraged to contact our provincial contact for Special Moves.
6. Any transportation routes for any overweight/oversize loads would need to be provided so that any necessary analysis could be done on the route to determine that any overweight/oversize items can be safely transported on the route indicated. This would be done in conjunction with the Special Moves Permit if one was deemed necessary for this project.
7. The TOR should include more detail on the information required by TIR for - the proposed effluent transmission pipeline within TIR highway right-of-way (or property that is currently owned by TIR) to ensure the proposal can be thoroughly reviewed to ensure it is feasible from a design/construction standpoint and is acceptable to TIR.
8. Include reference to liability to remediate any future impacts that may result from an effluent leak/release within or adjacent to crown property.
9. Include reference to requirement for compliance with Transportation of Dangerous Goods Regulations.