



Environment
Office of the Minister

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DEC 17 2019

Bruce Chapman
General Manager
Northern Pulp Nova Scotia Corporation
PO Box 549 Station Main,
New Glasgow, NS B2H 5E8

Dear Bruce Chapman:

**Re: Environmental Assessment – Northern Pulp Nova Scotia Corporation
Replacement Effluent Treatment Facility Project, Pictou County, Nova Scotia**

The environmental assessment (EA) review of the proposed Replacement Effluent Treatment Facility Project (the Project) in Pictou County, Nova Scotia is now complete.

There has been a thorough review of the information submitted by Northern Pulp Nova Scotia Corporation, as well as the information obtained from municipal, provincial and federal government reviewers and the public as part of the EA review. Submissions that were received as part of the s. 35 consultation and this regulatory approval process from Pictou Landing First Nation (PLFN) were also considered. Based on this review, I have determined that, pursuant to Section 18(b) of the Environmental Assessment Regulations, an Environmental Assessment (EA) Report is required.

After reviewing the additional information and analysis provided in the Focus Report, I have determined that there is not enough information to properly assess whether there may be adverse effects or significant environmental effects on fish, air, water resources and human health.

Reviewers and PLFN have identified several aspects of the proposed Project that remain unresolved, including but not limited to the following:

1. Marine:

There is not enough information to properly assess potential impacts of the project on fish and fish habitat, water resources and human health. The scientific uncertainty is highlighted in comments from federal and provincial reviewers, as well as other technical reviewers that represented a range of stakeholder groups and Pictou Landing First Nation. The review identified issues requiring further assessment and highlights the importance of further work to address potential risks to local fisheries and human health. In addition, further work is required to confirm the expected distribution and dispersion of sediments and contaminants included in the effluent.

2. Air

The Focus Report did not address the air dispersion modelling results. The modelling results predicted that several contaminants could exceed recognized air pollutant standards. The report did not propose mitigations or alternatives to address these predicted exceedances. In addition, the modelling was based on operating conditions that did not represent the maximum authorized production rate. Hence, modelling results may not represent the operating scenario for the occasion when the highest concentration of an air contaminant occurs at ground level. The air contaminants that are predicted to exceed recognized ambient air standards require further assessment to determine the risk to human health and whether impacts can be reduced or eliminated as appropriate. In addition, it will be important to establish a suitable framework for monitoring and reporting.

3. Land

The report did not provide a selected option for secondary containment of the pipeline, which was a component requested in the Focus Report Terms of Reference. Reviewers have indicated that limited information was provided to support the position that a thicker pipe will adequately protect water supplies and insufficient details were provided on how pipeline leaks would be detected and addressed. Sufficient consideration was not given to groundwater flow patterns or risk factors to local water supplies in the event of a pipeline leak or spill. Further work needs to be discussed with the Town of Pictou to establish confidence that the risk of negative impacts to the Town water supply has been reduced to an acceptable level.

4. Design

There remains a lack of certainty concerning raw wastewater characterization based on the limited number of samples that were analyzed for a comprehensive list of parameters (i.e. analysis of 2 samples, 1 year apart from Point A). Furthermore, only a limited number of parameters, from the wastewater characterization results were compared to proposed treatment technology specifications; therefore, the focus report did not evaluate whether the proposed technology was adequate to address several contaminants of potential concern.

Limited information and analysis were provided to support some aspects of facility design and planned operation. For example, flow data from Point A of the current effluent plant was not provided, and flow data used in the calculations for design capacity appear to be based on several assumptions (e.g., estimation of losses due to evaporation and in-mill processing) that are not well explained. The proposed use of cooling towers to reduce flow volumes will result in higher concentrations of contaminants in the influent, and information is needed to show how compliance with COD influent limits in the current Industrial Approval would be maintained.

Bruce Chapman

Concerns remain over the design, size and operation of the spill basin to accommodate both diversion of influent to Effluent Treatment Facility that is out of the normal range for parameters and for waste dangerous goods. It is unclear how different types of materials will be managed, including compatible and incompatible waste dangerous goods and sequential spills/leaks/releases. Lack of information has been provided concerning the detailed design of the spill basin (e.g., liner details, secondary containment features, clean-out access and connections to the Mill infrastructure and Effluent Treatment Facility), or clean-out and liquid/solid removal procedures for the different types of collected materials, and appropriate final disposal procedures that observe applicable provincial and federal regulations.

There is limited information about the specific routing of the pipe and feasibility of some aspects of construction (e.g., installation via pipe-jacking where crossing highways or structure locations and potential impact on stability of the causeway embankment). Further, no justification was provided for excluding leak detection from the underwater buried portions of the pipe. The Focus Report did not discuss potential impacts on water quality and biota resulting from undetected leaks in the underwater buried portions of the pipe, particularly in shallower near shore areas.

In addition to the above, concerns were raised about incorrect and incomplete baseline information; assumptions and methodology used in the analysis; and the absence of mitigation measures related to potential environmental effects. Further specifics regarding these deficiencies will be outlined in the forthcoming Terms of Reference for completion of an Environmental Assessment Report. Many are highlighted in the reviewer comments, which will be posted online.

The concerns noted above were raised through consultation with PLFN, submissions from the public and from municipal, provincial and federal government reviewers. Many aspects of the Terms of Reference for the preparation of the Focus Report were not sufficiently fulfilled in the submission by Northern Pulp. By requiring an EA Report, there will be an opportunity to resolve those aspects of the proposed Project.

In preparing the EA Report, Northern Pulp shall respond to comments from the above-noted parties and provide a comprehensive and complete assessment of the potential effects of the Project. Northern Pulp's assessment shall be presented in a clear format that can easily be reviewed by the Minister, PLFN, government reviewers, and the public.

Bruce Chapman

The EA Administrator will provide a Terms of Reference for the preparation of the EA Report. The Terms of Reference will be released by January 10, 2020. At that time, the public, PLFN, Northern Pulp, Provincial, Federal and Municipal governments will have 30 days to comment on the proposed Terms of Reference. All comments will be provided to Northern Pulp within 5 days of the end of the comment period. Northern Pulp will then have 21 days to respond in writing to the comments. Within 14 days from the final date for written response from Northern Pulp, the final Terms of Reference for the EA Report shall be provided to Northern Pulp. Northern Pulp will then have 2 years to submit the final EA Report.

Northern Pulp is expected to prepare an EA Report that fulfills the intent of the terms of reference and considers all the effects that are likely to arise from the Project, including any not explicitly identified in the Terms of Reference.

The EA Report must be a stand-alone document that presents a complete discussion and analysis of predicted effects (direct and indirect effects) that is qualitative and quantitative, evidence-based and supported by credible sources of information. This stand-alone report shall incorporate, where appropriate, the science and evidence outlined in the original EA Registration Document and in the Focus Report.

When the EA Report has been submitted, an initial review will be carried out to ensure that the types of information required have been provided. If the EA Report does not meet the terms of reference, Northern Pulp will be required to include further information before the EA Report can be accepted.

Once the EA Report has been accepted, please note that I have the option to refer the EA Report to an EA Review Panel for review. At the conclusion of this process, I must decide on one of the following: a) the undertaking is approved with conditions; b) the undertaking is approved without conditions; or c) the undertaking is rejected.

Please note that all comments received as part of the EA review will be posted on NSE's website. A detailed explanation of all concerns raised during the EA review are outlined in the comments and further details will follow in the terms of reference for the EA Report.

Sincerely,



Gordon Wilson, MLA
Minister of Environment