Comments: Focus Report for proposed replacement effluent treatment facility

## Dear Minister of Environment,

I am writing to submit feedback on the Focus Report for the Replacement Effluent Treatment Facility Project Proposed by Northern Pulp Nova Scotia Corporation:

First, I will offer comments on Section 9.0 HUMAN HEALTH. In this section the Focus Report states that, "EcoMetrix has initiated the HHRA and it is currently ongoing; however, its completion is not anticipated until spring of 2020" (pg. 165). As a Nova Scotia resident and Pictou County property owner in the Little Harbour/Kings Head/Melmerby Beach area, the impact on human health is my first concern. As written, the Focus Report is incomplete and does not answer the requested Terms of Reference section 9.2 sent to NPNS as directed by your letter to Mr. Chapman dated March 29, 2019.

A potential 85,000 m³ of contaminant effluent per day entering the Northumberland Strait is significant and I would expect NPNS to have placed greater priority on completing the HHRA section of the report. The public cannot fully comment on what is not presented.

The report uses language that diminishes the reality of dumping such a massive amount of treated effluent into an ocean that provides food, employment and recreation. Rather than saying clearly what contaminants are found in the effluent and the known impact of such contaminants on human health, the focus report uses the acronym COPC which stands for "Contaminants of Potential Concern" and vague references to future studies (Section 9.2.10). My fear is that this language masks the true issue that all effluent, treated or not, contains health impacting contaminants which can, and will, impact not only the physical environment, but also the air that we breath and human physical health. Much of the HHRA focus is on air quality and seafood consumption impacts, but the findings are incomplete. The real issue at hand is to fully understand the total amount of contaminants (COPCs) that will enter the water through the pipeline and what are the effects of those COPCs on human health factors.

My second concern with the report is the definition and parameters of the Regional Assessment Area (RAA) and the Local Assessment Area (LAA). The report does not provide detailed information on water-based distribution of effluent beyond a 200-meter radius. The information is focused on the RAA and LAA but does not really look at how effluent contaminants might migrate further to surrounding areas such as Pictou Island and the public swimming areas found at Melmerby Beach Provincial Park. A potential 85,000 m³ litres of effluent per day must go somewhere when it interacts with tides, weather patterns, water conditions and ice. Nothing in the report convinces me that the ocean water will dilute the effluent to a non-health impacting status.

A third area concern I find in reading the report stems from Section 7 dealing with FISH & FISH HABITAT. Page 129 of the report deals with fish that live within the RAA. The report details that 4 endangered species, 2 threatened species and 1 special concern species live within the Regional Assessment Area (RAA). Nothing in the report says what effect the effluent contaminants will have on those species due to 85,000 m<sup>3</sup> litres being pumped daily into the ocean RAA. On a further note, the report indicates the herring fishery will be impacted (pg. 131). As for the crucial area lobster fishery, the report says nothing about long-term effects. I find it troubling that in Table 7.3-2 detailing the Summary of Marine Impacts, Mitigation, and Overall Significance, it is repeatedly written that "Overall effects are considered to be generally minor, localized and generally reversible" (pg. 142-147). Absolutely no scientific information is provided for critique as to how the report writers arrived at that conclusion. I find it an afront to human intelligence that any company that dumps a potential 85,000 m<sup>3</sup> litres of effluent per day would come to such a conclusion that bottom feeding lobster and fish would only be affected in a minor way. What does that mean? It is never explained in the report. The information presented on pages 123-124 concerning "no significant impacts" only deals with the 5-200 metre area surrounding the effluent discharge point. Again, what science was used to arrive at that conclusion? What is not stated in the report is that even the treated effluent contains contaminants of concern that will not break down or become neutralized once dispersed in the salt-water. Negative health impacting toxins will in fact be dispersed impacting fish, birds and people.

My final comment has to do with the way the focus report was written. It is written to sell a pipeline. I am concerned that the misleading language style, such as using "COPCs" rather than simply "known contaminants" creates an illusion of benevolent authority and simply covers the truth. The incomplete answers evident in the HHRA section points to a process geared toward hiding the real and future impacts of dumping effluent into the ocean. The public has not received a full impact and disclosure document to review.

To conclude, the health of our Nova Scotia Environment is crucial to our human health for generations to come. Please hold NPNS accountable for human health and wellbeing. Moving known contaminants hazardous to human health and the ocean environment from one location to another does not fix a long-standing problem. In fact, it is spreading an environmental problem to other locations in Pictou County and beyond.

Sincerely,

Colleen Breen