Dear Premier Stephen McNeil and Minister for the Environment Gordon Wilson,

RE: Northern Pulp's Focus Report for the Replacement Effluent Treatment Facility project.

My name is Dr. Sarah Palmer, I live in Ottawa but my parents and family are still living in Pictou Landing having moved there in 1985. The current effluent system is accessed by an underground pipe that crosses my family property via an easement that covers about 875 m between Pictou Landing road and the shoreline.

I have a PhD in earth sciences from Queens University with concentrations in structural geology and geochemistry. I studied groundwater dispersion in ancient systems. I have worked in mining and established exploration work camps with well thought out environmental reports and contingencies all of which were well received by each of the communities I worked in from Northern Ontario and Nunavut to Sweden, Norway, Morocco and many other places. I have worked with first nations communities here in Canada and around the world with a strong relationship of engagement and have always addressed and mitigated concerns.

I have followed the various dealings of the pulp mill and the government and been particularly disturbed by things related to Northern Pulp and their parent company Paper Excellence as they seem much more removed from the community than previous owners. They have no corporate communications person who is based **in the community** and the current "community liaison committee" is made up of unknown individuals and therefore unable to be contacted with concerns directly. They are therefore completely ineffective as a "liaison" committee.

My main concern revolves around the fail safes and timely mitigation in place for breaches and ruptures in the effluent containment and transfer systems.

The mill personnel response time for spills usually begins AFTER my parents have noticed and called in the problem or leak. This has happened at least 6 times over the period in which my parents have monitored the relatively short length of pipe crossing our property. This is concerning because the new pipeline will no longer be monitored by my parents who to date have been the quickest and most effective way to alert the company of breaches.

The new system of monitoring the pipeline consists of very little in the way of fail safes for leaks or ruptures and I have seen no plan to immediately stop the effluent when a rupture occurs.

The mill facility is designed and laid out so that in the event of a rupture or failure of any large dangerous goods vessel or dangerous goods storage tank, the lost material will be contained in a containment area (if the tank is equipped with one)-

There should not be an if --- this needs to be standardized – no area should be at risk and all parts of the containment and delivery system need fail safes in case of a breach.

Breaches have happened too many times in the past over areas that are not in a watershed to take chances now! The future is about to become much more uncertain in terms of flooding and climate upheaval. Within the focus report, the current system is not good enough and I have not seen anything that indicates the degree of improvement required.

I would also point out that there is not topographic profile on fig 3.5-1 and without this data to the contrary it is quite obvious that any breach in the pipeline will contaminate well water. There is no way that the pipeline should cross this area without a system in place to divert effluent.

In summary I believe there needs to be

- 1. a clearly identified and present committee in place to deal with community concerns which will include environmental breaches.
- 2. a state of the art monitoring system which detects even minor changes in the flow and pressure exerted on the pipe with a fail safe that immediately stops the flow of effluent after a breach,
- 3. better data on the watershed areas and topographic areas defined where future floods due to climate change are likely and how this will affect the proposed system

The fail safes required for the inevitable breaches which have happened and will take place in the future are one of the most overlooked and critical aspects of the current focus report.

Regards, Sarah
 Sarah Palmer,