

Meeting regulations is not the same as protecting fisheries from harm

2 things about pulp effluent and fish are true. Both are important.

- 💧 Effluent quality from pulp and paper mills has improved over 47 years of regulation.
- 💧 Those improvements are not sufficient to protect fish, fish habitat and the environment.

70%

of pulp & paper mills are having harmful effects on aquatic life and habitat despite meeting current regulations .

Pulp and Paper Effluent Regulations (PPER) in Canada cover two matters; total suspended solids (TSS) and biochemical oxygen demand (BOD.) Even though total discharges of TSS and BOD in pulp and paper effluent decreased by approximately 90% and 97% respectively from 1970-2008, pulp mill effluents continue to have harmful impacts on fish, fish habitat and the environment.

Information gathered through environmental effects monitoring (EEM) at all Canadian mills points to the disturbing conclusion that although mills are meeting regulations and passing the PPER toxicity test, 70% are having harmful effects on aquatic life and habitat, and 55% are having harmful effects on the larger environment. ¹

This information led the federal department of Environment and Climate Change to undertake a modernization review of pulp and paper effluent regulations in 2017. "Results from EEM studies and the changing realities of the pulp and paper industry indicate a need to modernize the PPER to improve environmental protection," the department states. ²

Long term impacts

on reproduction and growth are not regulated under PPER.

If meeting regulations is not enough to prevent harm, neither is passing toxicity tests. Only one toxicity test is required under Canadian pulp and paper regulations. The required LC-50 test is for acute lethality. For this test, an effluent is considered acutely lethal if the treated effluent at 100% concentration kills more than 50% of the Rainbow Trout exposed to it during a 96-hour period.

Long-term effects, including impacts on reproduction or growth, cumulative impacts on fish habitat and the larger environment or accumulation of substances harmful for human consumption are not regulated under the PPER. Testing for environmental effects is required for information purposes. Only two mills in Canada test for and report impacts of effluent on the usability of fish resources by humans.

For 25 yrs

the regulations that apply to pulp effluent have remained unchanged.

Effluent from pulp and paper mills is regulated at the federal level principally by the Pulp and Paper Effluent Regulations (PPER), which form part of the Fisheries Act. The standards that apply to pulp effluent today were adopted in 1992 and have remained unchanged for 25 years. Highly toxic dioxins and furans are regulated under a separate Act.

Federal regulations cover only a few of the recognized harmful substances in pulp mill effluent. For example, there are no federal regulations for AOX compounds, a component of pulp effluent in mills that bleach with chlorine or a chlorine compound. AOX compounds are recognized as extremely toxic. They are not easily broken down by bacteria and thus bioaccumulate in the environment. Yet they are not included in PPER regulations. Neither are phenols, toluene, chloroform or chemical oxygen demand (COD).

Northern Pulp knows

that piping effluent into the Strait will impact the fisheries.

Among the changes being considered in the review of pulp effluent regulations are reduced limits for BOD and TSS, setting a limit for chemical oxygen demand which would capture less biodegradable organic materials which are not currently measured in regulations³, and setting limits for additional substances of concern.

Provinces may go beyond Federal standards and adopt stricter regulations for effluent from pulp mills. British Columbia, Alberta, Ontario and Quebec have adopted stricter regulations. Nova Scotia does not have regulations, but sets limits through individual industrial approvals. The EU has more protective regulations than Canada does.

Northern Pulp is aware that piping effluent into the Northumberland Strait will impact the fisheries. The conclusion of the *Stantec Receiving Waters Study* prepared for Northern Pulp (August, 2017) states:

Among the four potential outfall locations ... the Alt-D outfall location provides **the smallest potential long-term cumulative effects on the fishery and socio-economic environments, and therefore is considered the better outfall location** for the discharge of the treated wastewater from the mill. (Conclusion 2.4)

How much actual impact on fisheries will this “better outfall location” have? There has been no evaluation of actual impact on fisheries, fish, fish habitat or the larger eco-system. Fish studies have not been done. Further, the Stantec report did not even correctly identify where fishing takes place in the Northumberland Strait close to the proposed outfall site.

Northern Pulp’s chosen effluent outfall point is based only on a comparison between four generally similar options, all points in the nearer or deeper Strait area. The proposed outfall was determined based on comparing how effectively the effluent can be dispersed at each point.

Similar proposals to discharge pulp effluent into the Northumberland Strait have been dropped or rejected in the past due to environmental concerns. The fishermen know this. Northern Pulp knows it.

It’s 2018. Fisheries are a crucial part of the economy in Nova Scotia and neighboring provinces. Oceans are under increasing stress. Dead zones are growing. Protection of fish, fish habitat and fisheries in present conditions means we cannot sweep identified risks under the rocks based on soothing assurances of “meets regulations” and “passes toxicity tests.”

No evaluation

of impact on fisheries, fish, fish habitat or the larger eco-system has been conducted.

It’s 2018

We cannot sweep identified risks under the rocks based on soothing assurances of “meets regulations.”

“EEM (environmental effects monitoring) studies have shown that the effluents from 70% of pulp and paper mills are impacting fish and/or fish habitat and the impacts at 55% of these mills are indicative of a higher risk to the environment.”⁴

- Environment and Climate Change Canada, 2017

Proposed Modernization of the Pulp and Paper Effluent Regulations – Consultation Document

¹ *Proposed Modernization of the Pulp and Paper Effluent Regulations – Consultation Document*, Environment and Climate Change Canada, https://docs.wixstatic.com/ugd/b61814_dd299f5bb0914f959eaaaf94ca66db20.pdf

² Ibid

³ Ibid

⁴ Ibid

