

Clean the Mill Comments on Northern Pulp IA Appeal 'Fact' Sheet

March 28, 2015

Recently, the Forest Products Association of Nova Scotia circulated a **so-called 'Fact Sheet'** about Northern Pulp's IA. While this document contained many opinions of Northern Pulp, it was **short on facts**. In particular, there remains much uncertainty about which specific aspects of the IA Northern Pulp, and/or the Forest Products Association, is particularly concerned. Given the number of statements being circulated as fact, Clean the Mill would like to add the following information supported by named, independent third-party studies, Northern Pulp's own comments, and a well-documented public history of negligence:

Statements from Forest Products Association Fact Sheet	Clean the Mill Comments
<b>INTRODUCTION</b>	
Paper Excellence of Canada (PEC) purchased the mill 3.5 years ago with plans to invest and modernize the plant.	Industry sources revealed that pulp mills require \$50 million/year of capital investment to stay current. Notably, Irving Pulp announced a \$450+ million capital investment in their plant last year to double capacity, improve efficiency and achieve positive environmental improvements. NP and its predecessors have only spent \$80 million on upgrades since 1971 (see attached NP Q&A). <b><u>NP is CLEARLY lagging in its capital investments and commitments to improvement.</u></b> It has not been keeping pace with industry and relies too much on government funding.
Since its initial start-up in 1967 Northern Pulp has earned a reputation as one of North America's leading manufacturers of northern bleached Kraft pulp. Today the Pictou County mill is the cornerstone of the local economy.	We would agree NP has earned a reputation as widely reported in many media outlets, however, <b><u>we have not seen any objective reports praising them as a leading edge manufacturer in their industry.</u></b>  NP would certainly be an important contributor to the local economy, but until objective evidence to support this point is provided, the argument of 'cornerstone' cannot continue to be accepted at face value. Furthermore, the lost opportunities (lost investments due to poor air quality, deteriorating tourism, declining property values, etc) associated with the mill have not been factored into this determination.
<b>GENERAL</b>	
The new I.A. places a pulp production cap on the mill limiting the potential for financial stability and the ability to attract capital. Northern Pulp feels the mill should have the ability to increase production while being able to meet its environmental responsibilities.	Northern Pulp has repeatedly failed to meet its environmental responsibilities. And, NP increased production at a time the company knew pollution reduction equipment was failing (Summer 2014). <b><u>These are not the actions of a socially responsible organization.</u></b> Therefore, until the company can prove that it can indeed meet its environmental responsibilities, it would be irresponsible for a regulator (NSE) to permit greater production. Once the facility is completely in compliance and has shown that no further environmental degradation will result from increased production, then the company should be permitted to increase capacity, but not BEFORE these important benchmarks have been met.
The new I.A. requires additional annual testing in excess of the norm. The estimated additional cost of this requirement is in excess of \$1 million dollars.	There are two additional air emission stack tests required in the IA. According to NP, these should have a cost of \$60,000-\$80,000 per year (see attached NP Q&A). There are also additional studies required in this IA. The inclusion of study requirements is not unusual; the last IA also required additional studies and should, therefore, be an expected cost of NP's business.

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<p>It's the mill's position that this additional testing does not improve the mill's environmental footprint. [sic]</p>	<p>The tests and studies themselves will not improve the environmental footprint, but test results will permit accountability and study results will indicate the best course of action for NP's investments in modernization. If the studies are not undertaken, how will NP know how to proceed in this direction? It is the position of Clean the Mill that the information demands set forth in the IA are warranted.</p>
<p><b>WATER CONSUMPTION/WATER TREATMENT IMPACT</b></p>	
<p>Based on an independent 3<sup>rd</sup> party survey of chemical pulp mills in Canada in 2013 Northern Pulp is ranked middle of the pack when it comes to water usage.</p>	<p>We have not seen this study and no details are provided to locate it.</p>
<p>The new I.A. has a new daily use limit of 63,000m<sup>3</sup> of water/day. It's the company's position the new requirements are too dramatic a change in a short period of time and could lead to negative changes in the treated wastewater.</p>	<p>This is the target for 2020 and the first water use reduction milestone is technically not required by NP until Jan 30, 2018. In addition, the extent of the change appears to have been exaggerated as NP reported that it current uses 78,000m<sup>3</sup> of water/day now (<a href="#">see attached NP Q&amp;A</a>) and Nova Scotia Internal Services has confirmed that NP water use is as follows:</p> <ul style="list-style-type: none"> <li>The mill's average monthly usage over the last several years has been in the range of 16 million gallons per day (60,566 cubic meters) during the season from October to April, ranging upwards to a range of 21 million gallons (79,493 cubic meters) during the warmer season when the mill requires more cooling water.</li> </ul> <p><b>Therefore, the water reduction targets are neither too dramatic, nor too fast.</b></p>
<p>There's concern the smell could get worse as the effluent concentrate and temperature increases.</p>	<p>It could. However, the IA accounts for this potential complication. The IA requires new monitoring in order to determine the impacts of decreased water usage and allows for the possibility for changes in the event of adverse observations.</p> <p><b>Therefore, the IA adequately addresses NP's concern in this regard</b></p>
<p>While reducing waste water is a good thing very few jurisdictions in Canada have water flow limits.</p>	<p>There are Canadian jurisdictions that have water flow limits. And, there is a movement worldwide to regulate water use in pulp mills. In fact, a recent review concludes that "the North American pulp and paper industry is highly regulated with respect to water use and effluent quality" and that "the main drivers for responsible water management are regulations, the marketplace and drought" (<a href="#">Sappi (2012), Water Use and Treatment in the Pulp and Paper Industry, eQ Insights, 5</a>). Furthermore, water use reduction "can result in water and/or energy savings of hundreds of thousands to millions of dollars per year per mill site" (Sappi 2012).</p> <p><b>Thus, including water flow limits is becoming more common in the pulp industry, including Canadian jurisdictions and can have positive financial benefit to the company. Therefore, water use limits are win-win for the public and the company.</b></p>
<p>The mill's current waste water treatment facility operates well below federal regulatory levels-60-80% below permitted levels.</p>	<p>We have seen no evidence to support this point. Perhaps NP is referring to its daily/weekly tests, but this information is not publicly available.</p> <p>It should also be noted that federal regulatory limits of pulp mill effluent set the upper bound. Provinces are entitled to identify what specific limits they will tolerate within their region. And, Canada's federal limits are recognized as being</p>

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	<p>weak relative to the rest of the globe, BUT there are provinces (Alberta) that operate closer to effluent parameters internationally. (<a href="#">Alberta Environment (2005), Technology-based standards for pulp and paper mill wastewater releases, Pub. No: T/805, ISBN No. 0-7785-4032-4 (On-line Edition)</a>).</p> <p>In addition, a recent Stantec report identified that metal concentrations at the sludge disposal cell underdrain exceed CCME-FAL guidelines. No data is collected to know if these concentrations are exceeded at the aeration stabilization basin. Stantec also identifies that there are a number of other criteria that should be tested that are not. Therefore, there is evidence that regulatory limits might be exceeded if they were tested. Not testing for something does not mean it does not exist.</p> <p><b>Therefore, NSE is well within its rights to set effluent regulatory limits and should consider going even further than those contained in the IA given evidence from other jurisdictions and independent tests conducted at the Boat Harbour site.</b></p>
<p>The new I.A. requires total reduced sulphur (TRS) be measured and reduced in wastewater-a new requirement. In Ontario this is a brand new (optional) regulation. It is the company's position that before committing to reductions it is necessary to fully understand what the impacts are of implementing this.</p>	<p>To this point, it is a regulation in Ontario.</p> <p><b>Therefore, there is a basis for regulatory intervention by NSE.</b></p>
<p>Chemical Oxygen Demand (COD) is commonly tested, but not a regulated parameter in any jurisdiction in North America. The new I.A. has imposed COD as an indirect measurement of organic pollutants in the wastewater.</p>	<p>A study completed by AMEC in 2010 revealed that NP is in the 100<sup>th</sup> percentile of Canadian mills' average waste water COD levels. This means that NP was in the highest percentile of waste water COD levels, or, that <b>no other Canadian mill had higher levels of COD in waste water effluent</b>. (The AMEC report identified NP had a COD level of 78.5 kg/admt; The Canadian median COD level was 25.8 kg/admt.) This suggests that COD is a problem for NP and something must be done to bring NP's COD levels closer to the Canadian average. Furthermore, whereas other mills own their own treatment facilities, this facility is OWNED by the province of Nova Scotia.</p> <p><b>Therefore, regulatory intervention is definitely warranted as NP is the worst of the worst.</b></p>
<p><b>AIR EMISSIONS</b></p>	
<p>The new I.A. requires a particulate limit on the Recovery Boiler of 77mg/m<sup>3</sup> which is a concern as this represents an 80% reduction. Setting a regulated limit so close to the expected operating level is unusual</p>	<p><b><u>Yes, it is an 80% reduction, but the limit is 220% higher than what NP promised it could do.</u></b></p> <p>The previous limit of 375 mg/m<sup>3</sup> was an outdated standard, far beyond what other mills were permitted. The reduction to 77 mg/m<sup>3</sup> is well within the capabilities of the equipment. The manufacturer guarantee on the recovery boiler precipitator is that the new equipment will reduce PM to far less than the current limit of 77 mg/Rm<sup>3</sup>.</p> <p>“ ‘The guarantee from the supplier is that we should be between 30 and 50 milligrams per reference cubic metre,’</p>

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<p>and sets Northern Pulp up for failure. The limit in the previous I.A. was 375mg/m<sup>3</sup>.</p>	<p>said MacKenzie, adding that the current standard is 375 milligrams.” <a href="http://metronews.ca/news/halifax/1132609/nova-scotia-government-sets-may-deadline-for-pulp-mill-to-fix-emissions-problems/">http://metronews.ca/news/halifax/1132609/nova-scotia-government-sets-may-deadline-for-pulp-mill-to-fix-emissions-problems/</a>, Aug 21, 2014)</p> <p>In fact, 77 mg/m<sup>3</sup> is not the most aggressive particulate matter target in Canada. Since NP will have the most current technology available (new electrostatic precipitator) to reach the new target, it should have no trouble meeting the standard.</p> <p>In addition, the new IA does not reduce the limit on particulate matter from other plant equipment, despite more aggressive capabilities and expectations elsewhere (see Bruce and Van der Vooren (2003), <i>Trends in air emission limits for world class mills, Pulp &amp; Paper Canada</i>, 104:7). Notably, the power boiler upgrades completed in 2012 with a federal Green Transformation Fund grant were required to be able to meet a new in-stack standard of 90 mg/m<sup>3</sup> (<a href="https://www.scribd.com/doc/90047740/Northern-Pulp-mill-permit">https://www.scribd.com/doc/90047740/Northern-Pulp-mill-permit</a>, p. 17). The particulate matter limit on power boiler emissions remains at 150 mg/m<sup>3</sup> in the new IA.</p> <p>The new IA also requires that annual facility emissions of total particulate matter from main facility sources be limited to 2.0 kilograms of total particulate matter (TPM)/tonne of production. A comparison of several other Canadian kraft pulp mills revealed that PM emissions of 2.0 kg/tonne production is still far above the sampled Canadian average of 1.51kg/tonne production.</p> <p><b>Therefore, the only particulate matter emission reduction requirement in this IA is NOT an unrealistic expectation and should have been more aggressive.</b></p>
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