

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  |
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| <p><b>INTRODUCTION</b></p> <p>Paper Excellence of Canada (PEC) purchased the mill 3.5 years ago with plans to invest and modernize the plant.</p>  | <p>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&amp;A). <u>NP is CLEARLY lagging in its capital investments and commitments to improvement.</u> It has not been keeping pace with industry and relies too much on government funding.</p> <p>We would agree NP has earned a reputation as widely reported in many media outlets, however, <u>we have not seen any objective reports praising them as a leading edge manufacturer in their industry.</u></p> |
| <p>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.</p>   | <p>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, deterring tourism, declining property values, etc) associated with the mill have not been factored into this determination.</p>   |
| <p><b>GENERAL</b></p> <p>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.</p> | <p>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). <u>These are not the actions of a socially responsible organization.</u> 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.</p>   |
| <p>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.</p>   | <p>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&amp;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.</p>   |

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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 (see attached NP Q&amp;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>Therefore, the water reduction targets are neither too dramatic, nor too fast.</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. Therefore, the IA adequately addresses NP's concern in this regard</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" (Sappi (2012), Water Use and Treatment in the Pulp and Paper Industry, eQ Insights, 5). 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). 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.</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>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>weak relative to the rest of the globe, BUT there are provinces (Alberta) that operate closer to effluent parameters internationally. (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)).</p> <p>In addition, a recent Stanlec 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. Stanlec 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>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.</p> <p>To this point, it is a regulation in Ontario.<br/>Therefore, there is a basis for regulatory intervention by NSE.</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 <u>no other Canadian mill had higher levels of COD in waste water effluent.</u> (The AMEC report identified NP had a COD level of 78.5 kg/damt; The Canadian median COD level was 25.8 kg/damt.) 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.<br/>Therefore, regulatory intervention is definitely warranted as NP is the worst of the worst.</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>Yes, it is an 80% reduction, but the limit is 220% higher than what NP promised it could do.</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/Fm<sup>3</sup>.<br/>"The guarantee from the supplier is that we should be between 30 and 50 milligrams per reference cubic metre,"</p>   |

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and sets Northern Pulp up for failure. The limit in the previous I.A. was 375mg/m<sup>3</sup>.

said MacKenzie, adding that the current standard is 375 milligrams."

(<http://metronews.ca/news/halifax/1132609/nova-scotia-government-sets-may-deadline-for-pulp-mill-to-fix-emissions-problems/>, Aug 21, 2014)

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.

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), Trends in air emission limits for world class mills, *Pulp & Paper Canada*, 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> (<https://www.scribd.com/doc/90047740/Northern-Pulp-mill-permit>, p. 17). The particulate matter limit on power boiler emissions remains at 150 mg/m<sup>3</sup> in the new IA.

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. Therefore, the only particulate matter emission reduction requirement in this IA is NOT an unrealistic expectation and should have been more aggressive.

## Clean The Mill comments on Bill No. 89 - Boat Harbour Act

Boat Harbour was once one of the most pristine areas in Nova Scotia and in 1925 made the shortlist to become a National Park. But instead in the 1960's it was offered as an industrial treatment lagoon for a bleached kraft pulp mill by the government of the day. Every 24 hours, 90 million litres of fresh clean water gets pumped from Middle River, to the pulp mill and is deposited as industrial effluent into Boat Harbour. To gain a perspective on this, this is close to the same daily water requirements for the HRM. So imagine this amount of water being polluted each day, every day! And that this has been happening for almost 50 years now.

When we look at a piece of bright white paper we've mostly been programmed into thinking that white means clean and new. Since learning more about the process of a bleached kraft mill, white paper now makes me think of Boat Harbour and the amount of chemicals that it must take to turn wood from its natural colour to bright white. Although modern, state of the art facilities exist elsewhere in the Country and the rest of the World, our mill in Pictou County has fallen far behind the pack. On Environment Canada's website, there is information showing that in 2012 Northern Pulp was the 5th highest emitter of PM2.5. That is out of all industries of all types in the Country. Out of all the pulp mills in the Country, Northern Pulp was number one for releasing the most PM2.5. According to the World Health Organization, PM2.5 is the most carcinogenic form of air pollution and is linked to various forms of cancer, pulmonary diseases and other respiratory illnesses. In 2012, 63% of all industrial PM2.5 emitted in the Province of NS came from Northern Pulp alone. That's more than all of our coal fired power plants combined, and the situation is visibly worse now than it was in 2012.

I want to offer sincere thank you to the Government and to the Pictou Landing First Nation. Most people in Pictou County have never been to Boat Harbour. Most mill employees have never seen it and most governments have ignored it. I want to take this opportunity to say thank you to this Government for facing an extremely complex and difficult situation head on for the first time in its almost 50 year history. I also want to thank the members of all parties who support this Bill. I also want to congratulate and offer our sincere gratitude for the hard work of Chief Andrea Paul and her Band Council. There's no question that they've been the ones most affected by this issue alongside their neighbouring residents in Pictou Landing. I very much look forward to watching the whole community rise stronger through this and become vibrant and successful again. They deserve nothing but the best.

So personally speaking .... I've lived in Pictou County my whole life. I'm very fortunate to have a job that allows me to travel the World but I'm happiest when I'm back home with my family in good old Pictou County. There are many families including mine who are concerned about the long-term health impacts of living near this mill and Boat Harbour. My wife and I have talked many times about selling our house and moving away because of the concerns with the non-functioning filtration equipment at the mill. It's been bad. It's a serious worry and some of you have may have seen recent pictures or witnessed it firsthand but there's nothing like living in it that keeps you motivated and wanting to see things cleaned up. The mill has been here my whole life but I've never seen it as bad as it's been over the last few years. There are many days when you can't see through the smog from the Pictou Causeway to Green Hill or from the town of Pictou to the mill itself. When it lands heavy in the yard we turn off the air exchanger and make sure the kids aren't playing outside. Whenever I drive by a school yard or a soccer field and see kids out running and playing in the smog from the mill it makes me furious. They should have a choice not to inhale the toxins.

Many call this an emotional issue which is true, but it's an emotional issue that is based on facts. The mill has been operating with non-functioning filtration components since at least 2006 and this is totally unacceptable. As a husband and father of three young children I feel that my most important job in life is to keep my family safe. Air that you can't see through cannot be safe to breathe, especially the unfiltered emissions from an old and worn-down bleached kraft pulp mill that's being pushed to record breaking production levels. And on top of all this, it's been extremely frustrating that a group of volunteers has had to fight the government to do something that the government should have been doing in the first place. Now we really need the Government to stand up strong and be accountable to the people of Pictou County. With this file it is also extremely important to us that partisan politics to be placed aside in the interest of doing what's right and we hope to see more cooperation between all of the parties. All political parties played a role in creating the mess and all political parties should play a role in helping clean up the mess.

We are however encouraged by all the recent activity on this file. This is a very exciting time. The remediation of Boat Harbour will be a huge step forward for Pictou County and to say that it's long overdue would be an understatement. There will be challenges ahead but if Paper Excellence steps up to the plate financially, meeting their environmental obligations and are held accountable for the health and safety of the community and their employees, good things will most definitely

happen. The clean-up of Boat Harbour, the construction of a new industrial effluent treatment facility along with infrastructure improvements at the mill could potentially create a lot of jobs. Pictou County desperately needs Northern Pulp to shape up. We also need to work to attract new and sustainable business opportunities that are a true reflection of what we are capable of. If we remove the negative stigma we can raise the ceiling for our real economic growth potential. This whole movement to clean up Boat Harbour is being seen as a very positive step and will not only entice former residents to retire back home from out West but will also help attract new residents to the area along with new ~~and~~ business opportunities.

Although we are very optimistic about this Boat Harbour Bill, as Chief Andrea Paul stated it, "we remain cautiously optimistic". There has been a long history of non-compliance and lack of enforcement by the Department of Environment. It's been the lack of accountability by mill operators and governments that has gotten us into this mess. This is why strict enforcement of the new IA will be necessary to provide the goal posts along the way that need to be met. But again, we are encouraged and all of this is new and long overdue

There will obviously be a great concern about the industrial out-flow from a new treatment facility and where it might go. It's going to be extremely important to protect and preserve our lobster fishery and avoid creating another environmental disaster that could haunt us in the future.

Another big question is whether or not Nova Scotia tax payers will be giving any more money to Northern Pulp. Since 2009 the mill has received over \$139 million in financial assistance. And it hasn't yet been determined what it will cost to bring this mill into compliance with standards being met elsewhere in the World. All that we can really do at this point is assume that Northern Pulp's comments to the media are sincere and that they plan on being here for the long haul. If they decide to not invest in their own mill then in the words of a popular man in this house, "if it's not a good investment for private enterprise, then it's not a good investment for the government either."

No one wants to see people out of work. But we've also only ever really heard the success stories from the good end of the pipe. The stories from the bad end of the pipe are much different and have been ignored for a long time. I'm not just talking about the obvious environmental disaster, there are other local jobs and locally owned businesses at risk if we continue to support and maintain the status quo. Why did we lose 80 jobs last month, between the hardwood flooring place in Antigonish and the hardwood mill in Westville because neither place can get hardwood logs? Meanwhile logs of all types are being chipped and burned in Northern Pulp's biomass boiler for power generation. They need the equivalent of 40 truckloads per day just to keep the power on. The net job loss for business as usual has never been determined. All things need to be considered and we hope that the economic impact assessment portion of the process is fair, balanced and comprehensively accounts for the both positive and negative outcomes.

So again a big thanks for this positive first step. We are very hopeful and encouraged by this Bill and the support it has received from all parties. As we move down the road to the remediation of Boat Harbour and dealing with the air emissions problem at Northern Pulp, we remain hopeful that standards will be enforced. It's hard to look back and really blame previous generations for the mess that we find ourselves in now because so much about the negative health and environmental impacts was unknown and unimaginable back then. But in this day and age we know better and therefore we have to do better. It seems that we're now finally on the road to righting some wrongs so again thanks to everyone who supports this monumental Boat Harbour Bill. You should all sleep very well tonight.

Thank you,  
Dave Gunning