April 9, 2015

The Honourable Randy Delorey
Minister of Environment
Nova Scotia Environment
PO Box 442
Halifax, NS B3J 2P8

Dear Minister Delorey:

Re: Industrial Approval No. 2011-076657-A01
   Appeal pursuant to Section 137 of the Environment Act

Northern Pulp Nova Scotia Corporation ("Northern Pulp") appeals Industrial Approval No. 2011-076657-A01 (the "Approval") issued by Jay Brenton of the Nova Scotia Department of Environment (the "Department") on March 9, 2015 for the operation of Northern Pulp’s mill in Abercrombie Point, Nova Scotia (the "Mill").

Northern Pulp makes this appeal (the "Appeal") to you, the Minister of Environment, pursuant to section 137 of the Environment Act, SNS 1994-1995, c 1 (the "Act"). In the sections below, Northern Pulp states its reasons for this Appeal, outlines its specific objections to various provisions in the Approval and sets out its requested relief.

While Northern Pulp considers it necessary to proceed with this Appeal to protect the long term economic viability of the Mill, Northern Pulp remains open to working with the Department and the Province to achieve a long term solution with respect to the Mill.

SUMMARY OF APPEAL

In summary, Northern Pulp requests that certain provisions (identified below) of the Approval be removed or revised on the grounds that these provisions:

(i) are in breach of the Province’s contractual obligations to Northern Pulp under various agreements (which agreements the Department refused to consider in issuing the Approval) and impose conditions that in essence seek to achieve indirectly what the Province is not permitted to do directly, namely, require Northern Pulp to cease using its current effluent treatment facility ("Effluent Treatment Facility");

(ii) impose conditions that are impossible to meet and/or are prohibitory rather than regulatory in nature;

(iii) impose conditions that are too vague or uncertain;
(iv) are unrealistic and otherwise unreasonable; and/or

(v) are inconsistent with the protection granted to Northern Pulp by the Freedom of Information and Protection of Privacy Act ("FOIPOP").

Northern Pulp respectfully requests that you exercise your powers under Section 137(4) of the Act to allow Northern Pulp’s Appeal and remove or revise the provisions of the Approval as further outlined in this letter. Doing so would ensure that the Approval contains conditions that: (i) do not breach the Province’s obligations under the various agreements between the Province and Northern Pulp and do not effectively require Northern Pulp to change the location of its current Effluent Treatment Facility; (ii) are not impossible to achieve and are regulatory rather than prohibitory in nature; (iii) are not vague or uncertain, (iv) are realistic and otherwise reasonable; and (v) are not inconsistent with the protection granted under FOIPOP.

GROUND OF APPEAL

1. Department’s Refusal to Consider Province’s Contractual Obligations - Section 8(2)(c) of the Act

As you are aware, Northern Pulp and the Province are parties to a number of agreements in respect of the operation of the Mill, including:

1) Memorandum of Understanding dated December 1, 1995 ("MOU");

2) Lease dated December 31, 1995 ("Lease");

3) License Agreement dated December 31, 1995;

4) Indemnity Agreement dated December 31, 1995 ("Indemnity Agreement");


6) Lease Extension Agreement dated October 22, 2002; and

7) Acknowledgement Agreement by the Province dated May 12, 2008 ("Acknowledgement Agreement").

(collectively, the "Agreements").

Northern Pulp wrote to you on December 18, 2014 in order to ensure that the Department reviewed the Approval in light of the Province’s contractual obligations to Northern Pulp under the Agreements prior to issuing the final Approval. In addition, Northern Pulp requested a joint meeting with the Department of Environment and Department of Internal Services to discuss how a long term solution can be achieved in compliance with the terms of the Agreements and the Approval.

In a letter dated January 8, 2015, you responded: “While my department is aware of the existence of agreements between the Province and your company, the Province has maintained independence between the regulation of environmental issues and management of the various agreements with the mill.” You encouraged Northern Pulp to meet with Internal Services to discuss the Agreements and any implications that may arise from the issuance of the Approval.
by your Department, thereby refusing Northern Pulp's request to meet jointly with Northern Pulp and Internal Services.

Your express refusal to consider the Province's various contractual obligations in issuing the Approval and your refusal to meet jointly with Northern Pulp and Internal Services as requested by Northern Pulp is not in compliance with the mandatory requirement of Section 8(2)(c) of the Act which provides:

8 (2) The Minister, for the purposes of the administration and enforcement of this Act, and after engaging in such public review as the Minister considers appropriate, shall

[...]  
(c) consult with and co-ordinate activities with other departments, Government agencies, municipalities, governments and other persons; [emphasis added]

Any provision in the Approval which is inconsistent with the provisions of the Agreements is necessarily the result of the Department's refusal to consider those Agreements when it issued the Approval. Northern Pulp submits that those provisions of the Approval are unreasonable due to the failure of the Department to comply with the process of consultation and co-ordination required by its own governing statute in issuing the Approval.

In the Acknowledgement Agreement, the Province acknowledged, agreed and confirmed that each of the Agreements and understandings between the Province and the Mill's prior owner Scott Maritimes Limited ("Scott") are in good standing and will continue in full force and effect for the benefit of Northern Pulp.

Northern Pulp's current owners acquired the shares of Northern Pulp and have continued to invest substantial amounts in the Mill on the understanding that the Province could and would comply with its obligations under the Agreements. It is not unreasonable to anticipate and expect that government will comply with the contracts which it has entered into. It is unreasonable for the Department to issue the Approval with a stated disregard for those contractual obligations. Northern Pulp does not waive any of its rights under any of the Agreements.

Northern Pulp submits that, taken together, the objectionable conditions included by the Department in the Approval that are in breach of the Province's obligations under the Agreements are an attempt by the Department to indirectly achieve the Province's stated goal of closing the Effluent Treatment Facility (see, e.g., Agreement in Principle between the Province and Pictou Landing First Nation dated June 16, 2014). These provisions would force Northern Pulp to apply for an approval for and build an alternative effluent treatment system that meets conditions that would be applicable to a substantially new Mill. This is a goal which cannot be achieved directly under the Agreements which the Province has entered into with the Mill's owners or under the Department's own regulatory jurisdiction. Government cannot do indirectly what it cannot do directly and it is unreasonable for the Department to seek to do so by imposing conditions as part of a regulatory approval process aimed at achieving that indirect goal.

These provisions of the Approval, in addition to being in breach of the Province's obligations under the Agreements, impose conditions which are unreasonable for a mill that was built in the 1960s to meet without requiring that a substantially new Mill be built. While Northern Pulp has
invested in upgrades at the Mill, such equipment modifications will not achieve the requirements of the Approval. The Approval therefore essentially prohibits Northern Pulp from operating the current Mill, and requires Northern Pulp to construct a substantially new Mill, in breach of the Agreements. The cumulative cost and uncertainty associated with the approval and construction of a new effluent treatment system jeopardize the long term economic viability of the Mill and is inconsistent with the Agreements.

Government cannot arbitrarily revoke Northern Pulp’s contractual rights under the Agreements with the Province by way of an administrative approval process. Any re-negotiation of Northern Pulp’s rights or the Province’s obligations under the Agreements must necessarily be the result of written amendment to the Agreements. Northern Pulp approached the Department and the Province indicating that it was prepared to cooperatively work with the Province, as stated in Northern Pulp’s December 18, 2014 letter to you:

'We look forward to working with your department and Internal Services. We hereby request a meeting the first week of January with Internal Services and Nova Scotia Environment to discuss how a long term solution can be achieved in compliance with the terms of the above agreements and the Industrial Approval.'

Absent any such cooperation between the Province and Northern Pulp, certain provisions of the Approval cannot reasonably stand given their clear breach of Northern Pulp’s rights and the Province’s obligations under the Agreements. Any provision in the Approval that is inconsistent with the Agreements must be removed or revised so that the Approval is consistent with the Agreements, including:

A. Definition of Effluent Treatment System – Clause 1(t)

The defined term “Effluent Treatment System” in Clause 1(t) of the Approval now includes the “former stabilization lagoon (known as Boat Harbour)”. The defined term “Effluent Treatment System” is included as part of the definition of “Facility” and both terms are referred to throughout the Approval. Northern Pulp has never leased and has never been in control of Boat Harbour. The Mill discharges effluent into Boat Harbour at Point C in compliance with its obligations under applicable approvals and regulations, and has received a broad indemnification from the Province for claims and expenses related to Boat Harbour.

Under Section 4.01(g) of the MOU, the Province remained in possession of and responsible for the stabilization basin. The Lease definition of “Reconfigured Facility” or “Facility” makes it clear that the stabilization basin is not included as part of the Facility. Any terms in the Approval which impose responsibility on Northern Pulp for the stabilization basin known as Boat Harbour (“Boat Harbour”) by virtue of:

- including the “former stabilization lagoon (known as Boat Harbour)” into the definition of Effluent Treatment System, including Clauses 5(h) and (i), 6(h) and (i), 7(j) and (n), 12(au) and 16(b); or

- indirectly including the “former stabilization lagoon (known as Boat Harbour)” into the definition of the Facility, including Clauses 2(c), 3(a), 12(ac) and (am), 24(a) and 25(a),

are inconsistent with the terms of the Lease and Indemnity Agreement.
Northern Pulp therefore requests that the reference to the "former stabilization lagoon (known as Boat Harbour)" be removed from Clause 1(t) of the Approval.

B. Responsibility for Restoration of Stabilization Basin - Clause 7(n)

Clause 7(n) of the Approval requiring Northern Pulp to develop a plan for the long term environmental management and/or rehabilitation of Boat Harbour is expressly contrary to the Agreements. Under Sections 4.01(g) and 4.01(c)(ii) of the MOU, that responsibility falls upon the Province. Further, Section 4.01(f) of the MOU provides that Northern Pulp shall have no obligation or responsibility to restore the stabilization basin, which restoration will be undertaken by the Province. Northern Pulp is entitled to indemnification for any such costs under the broad provisions of the Indemnity Agreement.

Northern Pulp therefore requests that Clause 7(n) be removed from the Approval.

C. Spill Containment Plans – Clauses 14(m) and 14(n)

Clauses 14(m) and 14(n) require Northern Pulp to submit plans to the Department with respect to spill containment. However, Northern Pulp under the Lease is entitled to the use of the Effluent Treatment Facility until 2030 and presently uses that facility for spill containment, which use has been wholly adequate to date.

Requiring Northern Pulp to undertake a new spill containment system when Northern Pulp already has an adequate containment system available to it, which it is contractually entitled to use, provides no additional benefit to the environment and is in breach of the Province's obligations under the Agreements. As Northern Pulp's current system is adequate to protect the public and environment, Clauses 14(m) and 14(n) are inappropriate. Requiring Northern Pulp to undertake a new spill containment system would also be in breach of Northern Pulp's contractual rights under the Agreements. Northern Pulp requests that these Clauses be removed entirely.

D. Water Supply Agreement – Clauses 5(d) and 5(e)

Clause 5(d) of the Approval limits daily water consumption to a rate of 63,000 cubic meters per day by January 30, 2020. For comparison purposes, this represents an intensity of 72.2 m3/Adt. Clause 5(e) of the Approval also requires Northern Pulp to achieve certain water reduction milestones in the meantime. Clause 2.01 of the Water Supply Agreement says that the Province is obliged to continue to supply up to 25 million imperial gallons (or 113,652 m3) of fresh water per day to the Mill until 2021.

The intention of the parties in agreeing to the Water Supply Agreement is clearly contravened by the reductions required by Clauses 5(d) and 5(e) of the Approval. Northern Pulp remains willing to work cooperatively with the Department, as part of an overall negotiation with the Province with respect to the Agreements, to achieve water reductions that benefit the environment but are also practical and realistic. In the absence of such discussions, however, Northern Pulp requests that Clauses 5(d) and 5(e) be removed as they are clearly in breach of the Province's obligations under the Water Supply Agreement and are therefore unreasonable.
E. Surface Run-Off Diversion - Clause 6(c)

The AMEC Report\(^1\) at p. 26 estimates that surface run-off accounts for 2.0 m\(^3\)/ADt of effluent (rain water entering process sewers). See enclosed KSH Memo\(^2\), at p. 6-8, where KSH has provided more extensive calculations that indicate a similar volume. As a very small fraction of the total flow (less than 1.5% of the total effluent flow for the highest month of the year, April), requiring Northern Pulp to divert surface run-off water into the Pictou Harbour is unreasonable.

Northern Pulp's current practice with respect to the surface run-off stream is to treat it with the Mill effluent, which system (as discussed above in Section I.C.) Northern Pulp is entitled to use until 2030. Clause 6(c) is improper as Northern Pulp's current system is adequate in protecting the public and environment and requiring Northern Pulp to undertake a new surface run-off water diversion program would be in breach of Northern Pulp's contractual rights under the Agreements.

Therefore, Northern Pulp requests that Clause 6(c) be removed.

F. Point D Monitoring – Clause 7(o)

Clause 7(o) requires monitoring at Point D for the parameters in Table 6 of Appendix A. As Northern Pulp's obligations cease at Point C under the Agreements, Northern Pulp cannot properly be responsible for monitoring at Point D, a location in the control of the Province. Northern Pulp therefore requests that Clause 7(o) be removed entirely.

G. Limits in Excess of Pulp & Paper Effluent Regulations – Clauses 6(e), 6(f), 8(d) and 8(f)

Section 4.01(k) of the MOU provides that the Province will impose operating limits on Northern Pulp that reflect and do not exceed or apply more stringently than the standards set out in the Pulp and Paper Effluent Regulations (Canada) ("PPER").

As the PPER does not contain limits on COD and TRS, the Approval under Clause 6(e), with respect to COD, and Clause 8(d), with respect to TRS, imposes more stringent operating limits on the Mill than are reflected in the PPER.

Further, to the extent that limits on COD have a limiting effect on BOD, the required reductions in COD under Clause 6(e) of the Approval result in more stringent conditions being imposed on the Mill, notwithstanding that Table 6 of the Approval indicates that limits for BOD are at the rate set by the PPER.

BOD\(_5\) (Biochemical Oxygen Demand) is the amount of oxygen required to biologically oxidize the soluble components in an effluent sample incubated for a 5-day period. It is a measure of easily biodegradable organics that can be utilized as food by naturally occurring organisms. BOD\(_5\) is an indirect measure of how the easily biodegradable organics in the effluent will consume dissolved oxygen in the receiving waters as natural microorganisms consume these

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\(^1\) The Department indicated to Northern Pulp that AMEC was consulted during the development of the Approval. The April, 2010 AMEC Report entitled "Boat Harbour Return to Tidal Re-Evaluation Final Report" ("AMEC Report") is the latest report that was made available to Northern Pulp.

\(^2\) Memo from KSH Solutions Inc. ("KSH") dated March 31, 2015 entitled "Technical Assistance with Appeal of Final Industrial Approval" ("KSH Memo").
organics, thus potentially affecting flora and fauna due to reduced dissolved oxygen concentrations. COD (Chemical Oxygen Demand) is the amount of oxygen required to chemically oxidize the soluble components in an effluent sample. COD is a measure of all organics (lower molecular weight biodegradable and higher molecular weight non-biodegradable) as well as oxidizable inorganics.

COD will always be the greater of the two, as BOD₅ is a percentage of COD. It is generally accepted that COD and BOD share an empirically demonstrated relationship. Fairly regular relationships exist between COD and BOD₅ for any given industrial or municipal wastewater stream. Once the average COD:BOD₅ ratio for a particular wastewater stream is established, a relatively simple and quick 1-hour COD test can be used to predict BOD₅ with relative reliability. This is why COD tests are conducted, but rarely reported. Kraft mill lignin and cellulose contain both low and high molecular weight organics. Therefore, any measures undertaken to reduce COD at the Mill will undoubtedly reduce BOD₅ as well, in breach of the MOU. See enclosed Klopping report at p. 3-4.³

As a result of the inconsistency of these provisions with the MOU, Northern Pulp submits that Clauses 6(e) and 6(d) are unreasonable and therefore requests that these provisions, as well as the related provisions at Clauses 6(f) and 8(f), be removed.

H. Precluding Use of Boat Harbour Effluent Treatment Facility – Clauses 5(h), 5(i) and 5(j) and Clauses 6(h), 6(i) and 6(j) and Table 6A

Under the Lease, as extended, Northern Pulp has the right to exclusive possession and occupation of the Effluent Treatment Facility until 2030. The provisions of the Approval that effectively preclude Northern Pulp from using the Effluent Treatment Facility for the Mill’s operations are inconsistent with the provisions of the Lease, including Clauses 5(b) and Clause 14 of the Lease.

The effect of Clauses 5(h), 5(i) and 5(j) and Clauses 6(h), 6(i) and 6(j) of the Approval is to require Northern Pulp to apply for an amendment to the Approval if Northern Pulp’s modeling of water use reduction projects shows that the final wastewater effluent quality will not meet the requirements of Table 6 of the Approval, without modification or addition to the Effluent Treatment System as configured as of the date of the Approval. The application for an amendment must include a plan for alternative effluent management and/or treatment designed to meet the requirements of Table 6A of the Approval.

These provisions make it clear that the Department intends to require Northern Pulp to discharge its effluent at a treatment facility at a location which has yet to be determined if it is unable to comply with the conditions imposed. By specifically not contemplating or providing a means for compliance to be achieved through modifications or additions to the current Effluent Treatment System, the Province is in breach of the Agreements with Northern Pulp that entitle Northern Pulp to use the Effluent Treatment Facility until 2030. The estimated capital cost of constructing a new effluent treatment plant is in excess of $100 million.

Northern Pulp therefore requests that any Clause in the Approval which contemplates that Northern Pulp cease using the Effluent Treatment Facility prior to 2030, including Clauses 5(h), 5(i), 5(j), 6(h), 6(i) and 6(j) and Table 6A, be removed.

³ Report from Paul H. Klopping dated April 8, 2015 (“Klopping Report”). Paul Klopping has been auditing the Mill since 2005.
I. Rehabilitation Plans – Clause 24

Clause 24(a) of the Approval provides that Northern Pulp must submit a detailed closure plan to the Department one year prior to the decommissioning or closure of the Facility or any part thereof. To the extent that the definition of Facility in the Approval incorporates by reference to Effluent Treatment System the “former stabilization lagoon (known as Boat Harbour)”, Northern Pulp refers to Sections I.A., I.B. and I.H. above and submits that any requirement under Clause 24 for Northern Pulp to cease using its current Effluent Treatment Facility, or submit any plan or undertake any costs or rehabilitation with respect to Boat Harbour is in breach of the Lease and the Indemnity Agreement. Northern Pulp is entitled to indemnification from the Province in respect of any cessation by Northern Pulp of the Effluent Treatment Facility and any costs for any rehabilitation of Boat Harbour imposed by the Province on Northern Pulp, under the Approval or otherwise.

Northern Pulp requests that Clause 24 be revised to acknowledge that any cessation of Northern Pulp’s use of the Effluent Treatment Facility and any rehabilitation of Boat Harbour are the Province’s responsibility and the plans and costs thereof will be assumed by the Province.

II. Prohibitory and/or Impossible Provisions

A. Capital Investment Required to Comply with Approval is Prohibitory - Clauses 5(i), 6(c), 6(g), 6(i), 14(m) and 14(n)

In addition to being in breach of the Agreements as discussed throughout Section I above, Northern Pulp's compliance with the Approval will require Northern Pulp to undertake significant capital expenditures estimated to be in excess of $90 million, to divert surface run-off water to the Pictou Harbour, to implement a new spill containment system, and to reduce COD. See enclosed EKONO Memo, p. 2.⁴

The estimated $90 million in capital expenditures referred to above does not include the capital expenditures to construct a new effluent treatment plant in order to comply with Clauses 5(i) and 6(i) of the Approval, estimated to be in excess of $100 million. This requirement is also in breach of Northern Pulp’s rights under the Lease, as discussed in Section I.H. above.

The cumulative effect of the capital cost associated with Clauses 5(i), 6(c), 6(g), 6(i), 14(m) and 14(n) of the Approval is effectively the prohibition of Northern Pulp’s operation by the Department, instead of the Department’s regulation of it.

With respect to COD, Clause 6(g) requires Northern Pulp to develop a plan for additional reductions to achieve a maximum effluent COD of 11,890 kg/day at Point C. This equates to a 77% reduction from the Mill’s present operation.⁵ Such a provision is not regulatory in nature. It is prohibitory. That is, the Approval through Clause 6(g) has the effect of prohibiting Northern Pulp’s activities, rather than regulating them. As discussed further in Section II.B. below, the

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⁴ Memo from Heikki Mannisto and Eva Mannisto dated April 6, 2016 entitled “Possibility to meet COD limit of 11,890 kg/day” (EKONO Memo).

⁵ The average annual COD at Point C for the period of January 1, 2010 to December 31, 2014 is 58.8 kg/Adt. At 873 Adt/day, that equates to 51,350 kg/day at the end of the Approval if the Mill is running at current levels. 11,890 kg/day represents an intensity of 13.6 kg/Adt at Point C.
COD reduction may not even be possible and any capital investments in an attempt to achieve this requirement would be prohibitory.

With respect to surface run-off diversion under Clause 6(c), the new segregated system would require a new sewer network, retention ponds, oil and sediment traps, sample collection, alarms and a mechanism to divert this stream back to the main Mill effluent stream if contamination was detected. This new non-contact outfall will require permits from the Department as well as Environment Canada and the Department of Fisheries and Oceans. Northern Pulp has no guarantee that the Mill will receive these required approvals from these departments.

A new spill containment system under Clause 6(g) is also unreasonable in that it imposes significant cost on Northern Pulp without additional environmental or public benefit and is in breach of the Agreements.

The high capital cost of complying with any or all of Clauses 6(c), 6(g), 14(m) and 14(n) are completely disproportionate to the benefit, if any, to the public and the environment of these measures. The surface run-off diversion requirement is disproportionate given the small fraction of the flow that surface run-off represents and the fact that it is presently treated with the Mill effluent. The spill containment requirement is not only disproportionate but unnecessary because Northern Pulp already has an adequate spill containment system available to it. The Department is aware through the AMEC Report that process technologies for reducing COD to the requirement of Clause 6(g), assuming those reductions are achievable, would be prohibitory. The timelines contained in the Approval for achieving these Clauses are too short for such major construction projects to be completed. Therefore, the conditions in the Approval are impossible for Northern Pulp to meet and are prohibitory.

Through the cumulative effect of these Clauses, and the capital cost associated therewith, the Department is prohibiting the Mill from operating. Instead of regulating the existing Mill, the Department is requiring that Northern Pulp build a substantially new Mill. Provisions of regulatory approvals that prohibit rather than regulate operations are unreasonable and ultra vires. Therefore, Northern Pulp requests that Clauses 5(i), 6(c), 6(g), 6(i), 14(m) and 14(n) be removed from the Approval.

B. COD Reduction is Prohibitory and Impossible to Meet – Clause 6(g)

As noted in Section II.A. above, the proposed COD reduction of 77% under Clause 6(g) of the Approval is prohibitory not only because of the capital investments in order to attempt to achieve this requirement but also because the proposed COD reduction is unrealistic and is essentially impossible for Northern Pulp to meet.

The AMEC Report provided an assessment of the status and operation of the existing treatment facility for the Mill as well as preliminary engineering for several effluent treatment alternatives. The assessment was conducted at the time that the regulatory discharge for the Mill was located at Point D. The AMEC Report concluded that the Mill’s Aerated Stabilization Basin (“ASB”) was operating well. Since the regulatory discharge point was moved to Point C on July 1st, 2010, there have been no incidences of daily or monthly BOD₅ or TSS being over the limits in the PPER. In fact, all tests have shown that the Mill is well below the regulated limits.

Even though the AMEC Report was based on outdated information and therefore could not recognize the current operational attainments of the Mill, the AMEC Report itself demonstrates that it is simply not possible for the Mill to achieve this COD reduction. As such, the
requirement that the Mill achieve the reduction required by Clause 6(g) amounts to a prohibition of the Mill’s operations, rather than the regulation of it, and therefore is unreasonable.

Appendix 2 of the AMEC Report contains the preliminary engineering for the effluent treatment alternatives with mass balances (annual averages and not daily limits). The most stringent case in the AMEC Report, Case 3, completely abandons the Mill’s effluent treatment facility and replaces it with a new Activated Sludge Treatment (“AST”) system and includes “Significant Improvements & Water Use Reduction”, as outlined in section 4.2.3 of the AMEC Report. Drawing #158229-100-6-923 is the mass balance for the New Treatment Plant – Case 3. This Case assumes a 50% reduction in liquor losses will be achieved (20,400 kg/day to 11,400 kg/day). It also assumes marginal increase in production with a design capacity of 908 Adt/day. Incineration of Waste Activated Sludge would occur in the Recovery Boiler, which at present is not permitted in Northern Pulp’s Approval. The predicted effluent flow is 65,151 m3/d as an annual average; the new daily limit of 67,500 m3/d required in the Approval is even more stringent than the AMEC mass balance and does not consider seasonal variations.

The predicted COD for Case 3 is 70,900 kg/day. The typical COD removal for a new AST system would be in the neighbourhood of 50 – 60%. Even at the higher end of that removal efficiency (60%), the final COD discharge would be 28,360 kg/day (70,900 kg/day x 0.4). In summary, Case 3 demonstrates that even with significant in-Mill improvements and a brand new AST treatment system, the Mill would still exceed, by more than double, the COD daily limit of 11,890 kg/day at Point C as set out in the Approval at Clause 6(g). AMEC recognizes that other process technologies that were not included in Case 3 would be economically prohibitive to the Mill. The Klopping Report, EKONO Memo and McCubbin Report⁶ all agree that the requirement contained in Clause 6(g) is unrealistic and that the associated costs would be significant.

Therefore, the requirement contained in Clause 6(g) of the Approval, as a daily limit representing a 77% reduction from the Mill’s current annual average for the Mill’s current operations, is impossible for Northern Pulp to meet. The Department included the requirement of Clause 6(g) in the Approval knowing that the AMEC Report says that the Mill cannot achieve that requirement even if the Mill adopted the strictures of Case 3 including installing a completely new treatment system. The requirement of Clause 6(g) is completely untenable, even according to the Report on which the Approval is based. The Department therefore must be considered to have included this provision in order to prohibit the Mill’s operations.

The Approval contains conditions that treat the Mill as if it is a new mill and as such the Department has imposed regulatory standards on the Mill that are prohibitory to the existing Mill operating. Provisions of regulatory approvals that prohibit instead of regulate and that are impossible to meet are unreasonable and ultra vires. Therefore, Northern Pulp requests that Clause 6(g) be removed from the Approval.

C. Modeling Deadlines are Impossible to Meet - Clauses 5(h) and 6(h)

Clauses 5(h) and 6(h) of the Approval require Northern Pulp to submit to the Department modeling for all reduction stages along with a list of planned projects required under Clauses 5(e) and 6(e) no later than October 30, 2015.

Northern Pulp’s consultants have indicated that it is impossible to complete in-Mill engineering studies and then adequately complete effluent quality modeling to predict Mill wastewater

⁶ Report from Neil McCubbin dated April 6, 2015 ("McCubbin Report").
changes for submission to the Department by October 30, 2015. It is not reasonable to require such a deadline considering the impossibility of meeting that deadline as well as the fact that the modeling is for reductions that are not required until 2017.

In Northern Pulp's submission, October 30, 2016 is more reasonably attainable and appropriate. Therefore, Northern Pulp requests that Clauses 5(h) and 6(h) each be revised to change the deadline for this study from October 30, 2015 to October 30, 2016.

D. Regulatory Compliance without Modification or Addition - Clauses 5(i), 6(i) and 6(j)

Northern Pulp is also precluded through Clauses 5(i) and 6(i) from achieving the requirements of the Approval through modification or addition to the effluent treatment system as configured as of the date of the Approval, and through Clause 6(j) from reduction and prevention of liquor losses entering the effluent system. In addition to being contrary to the Agreements as discussed in Section I.H. above, requirements that a proponent achieve regulatory compliance without making improvements to the existing system are prohibitory on their face, and do not serve the public or benefit the receiving environment. Northern Pulp again requests that Clauses 5(i), 6(i) and 6(j) be removed.

III. Vague and Uncertain Provisions

A. New Treatment Facility - Clauses 5(h), 5(i) and 5(j) and Clauses 6(h), 6(i) and 6(j) and Table 6A

In addition to the objection noted in Section I.H. above, the majority of parameters and discharge limits in Table 6A in the event that Northern Pulp is required to discharge its effluent at a treatment facility at a different location have yet to be determined. Those limits are specifically contemplated as being determined based on an unknown location of a new treatment facility and on results of a receiving water study yet to be completed. That receiving water study must meet the satisfaction of the Department, yet the Approval does not indicate any criteria upon which such water study will be considered satisfactory. Northern Pulp considers the requirement to apply for and obtain approval of an as-yet-unidentified discharge location to be unreasonable.

At present, there is an absence of standards and guidelines in Clauses 5(h), 5(i), and 5(j) and Clauses 6(h), 6(i) and 6(j) and Table 6A. These provisions are too vague and uncertain to be considered reasonable. The conditions contain no limitation on the Department's discretion and as a result Northern Pulp has no fair notice of the conditions it must meet. Therefore, Northern Pulp requests that these provisions be removed.

B. COD Reductions - Clause 6(e)

The provisions in Clause 6(e) requiring reductions in COD do not specify or provide a means for calculating the base point for measuring such reductions. These provisions are therefore too vague to be reasonable and therefore must be removed.

IV. Unrealistic and Otherwise Unreasonable Provisions

It is clear that many provisions of the Approval are based on the AMEC Report. However, as noted in Section II.B. above, the AMEC Report is outdated and does not represent the Mill's
current operations and its operational achievements since the date of the AMEC Report. As such, certain provisions imposed by the Department in reliance of this Report are unreasonable.

The AMEC Report ranks Northern Pulp in the 95th – 100 percentile on water usage in Canada. In 2007, the year that Northern Pulp was benchmarked in this 2010 study, the Mill’s regulated effluent discharge point was Point D exiting the Boat Harbour basin. In July 2010, the regulated effluent discharge point was moved back to Point C exiting the ASB. Point D is not representative of the Mill effluent flow when compared to other mills because it is downstream of the treatment plant. Effluent flow at Point D is historically 25% higher than at Point C due to surface run-off from the large Boat Harbour basin. Surface run-off was not taken into account in the AMEC Report, and therefore comparisons are not valid. Comparison of Point C data at the end of the treatment process is appropriate for benchmarking purposes. Table I shows the decrease in effluent flow from 2010 forward:

<table>
<thead>
<tr>
<th>Regulated Outfall Location</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point D</td>
<td>112</td>
<td>133</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point C</td>
<td></td>
<td>94</td>
<td>89</td>
<td>87</td>
<td>86</td>
<td>88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the Approval is clearly based on a lack of appreciation for the Mill’s current operations, including an outdated report from AMEC which contains conclusions that are no longer correct, the Department has no basis for many provisions contained in the Approval. It is unreasonable for the Department to impose regulatory standards based on a report that relies on almost 10-year-old data and disregards the achievements of the Mill since that time.

Other provisions in the Approval are unreasonable as they provide little or no additional environmental benefit but impose very significant costs on Northern Pulp and therefore are improper. As well, statements made by the Department in issuing the Approval make it clear that some provisions of the Approval are based on a misunderstanding of or lack of appreciation for the Mill’s operations, which make those provisions unrealistic. Some provisions in the Approval are unreasonable as they fail to recognize industry norms or factors outside of Northern Pulp’s control. Others are simply inaccurate. Those provisions must therefore be removed or revised as set out in the Sections below.

A. Water Reduction Requirement – Clauses 5(d) and 5(e)

As stated by all effluent experts (Ken Frei and Guy Martin of KSH, Paul Klopping, Neil McCubbin, and Heikki Mannisto and Eva Mannisto of EKONO), the daily limits for water intake and effluent contained in the Approval are highly unusual. Few jurisdictions place flow limits in general on intake and effluent; exceptions are generally where the mill makes up a large percentage of the waters (usually rivers) that it is drawing its water supply from or is discharging effluent into. Mills that ultimately discharge into marine environments do not typically have these restrictions: see KSH Memo, p. 4. The AMEC Report at p. 30 refers to the 2007 EKONO study which also recognizes that such limits will only be placed on mills in certain circumstances, which Northern Pulp notes are not applicable to the Mill.

The requirements related to water reductions in the Approval appear to be based on a mischaracterization of the Mill’s water usage. A Departmental document accompanying the
release of the January 30, 2015 version of the Approval stated that “The Mill is a large consumer of water, especially compared to other mills.” In fact, Northern Pulp’s water usage is average by comparison to other Canadian mills. Enclosed is a copy of the Forest Products Association of Canada survey entitled “FPAC 2013 Energy and Environment Benchmarking Report – Pulp and Paper Sector” dated March 10th, 2015 (“FPAC Report”). The following graph is an excerpt from the FPAC Report. With 20 out of a possible 30 mills reporting, Northern Pulp ranks the 8th best in the survey for water use intensity:

![Graph showing water use intensity](image)

Reductions of water flow of the magnitude contained in the Approval could have negative effects on the biological treatment process and ultimately the receiving water, increasing odour for residents who live in the vicinity of the effluent treatment centre.

As noted in Section I.D above, Clauses 5(d) and 5(e) should be removed from the Approval for being in breach of the Water Supply Agreement. Clauses 5(d) and 5(e) are also unreasonable as they ignore industry norms and are based on a mischaracterization of the Mill’s water usage, as a result of the Department’s reliance on an outdated report. Therefore, Northern Pulp repeats its requests that these Clauses be removed.

**B. TRS Reduction Requirement – Clauses 8(d), 8(e) and 8(f)**

The new requirement under Clause 8(d) for water-phase TRS measurements in the effluent are best described by the KSH Memo at p. 14-16. In summary, Clause 8(d) is modeled after
Ontario's new 2014 Air Pollution - Local Air Quality Regulation (which imposes certain air standards, including TRS) and the Ontario Technical Standards to Manage Air Pollution. To Northern Pulp's knowledge, Ontario is the only other province that is introducing this standard. Mills may comply with the Regulation by electing to register under the optional Technical Standard which has phased-in limits for TRS in water entering the wastewater treatment system. The Ontario Ministry of the Environment researched the relationship between TRS effluent loading and TRS in ambient air originally reported by the US EPA. Because the understanding of the relationships of TRS effluent loading and TRS in ambient air are still in their infancy and the influence of other parameters (including pH, temperature and the various types of odoriferous compounds present) are not well known, the Ontario government introduced this as an optional standard that mills could choose to apply for. Mills that choose to apply will, over time, provide data that will lead to improved understanding of the relationships between effluent concentrations and air quality. The optional nature of the standard gives Ontario the ability to modify the standard as is deemed necessary as information and data become available. By imposing Clause 8(d) in the Approval, the Department has applied the optional Ontario standards as a hard and fast requirement that must be abided by without regard for the outcome of the Ontario mill experiences. If the limits are deemed to be unrealistic, Ontario has allowed room for possible changes, the Department has not.

It is of particular note that Northern Pulp is regulated to fixed TRS limits, including 3-fold reductions in coming years, when the Mill does not have any baseline data. The limits in Clause 8(d) have been set by the Department before any data has been gathered and before it is known if there is even an environmental reason to impose such limits. Ontario has recognized that there is not enough known yet about the relationship between TRS effluent loading and TRS in ambient air to justify the regulation. What is an optional consideration in Ontario because the precise relationship between TRS effluent loading and TRS in ambient air has not yet been demonstrated, the Department has made a mandatory requirement of the Approval. It is unreasonable for the Department to impose a limit before knowing if there is a relationship necessitating that limit.

Northern Pulp has contacted a mill in Ontario and all of the major laboratories in Canada. It appears that no Canadian laboratories (after conferring with their satellite offices) are capable of performing the test required by Clause 8(d), NCASI Method RSC - 02.02. At this point, the closest capable lab that Northern Pulp has found is located in Simi Valley, California. This demonstrates that the Department is imposing a requirement on the Mill is entirely inconsistent with other Canadian jurisdictions.

As noted in Section I.G above, Clauses 8(d) and 8(f) should be removed from the Approval as they are in breach of the MOU. Clauses 8(d) and 8(f) should also be removed as there is no known scientific basis for the limit, which regulators elsewhere have recognized. Northern Pulp does not object to performing testing of TRS in accordance with Table 6 for the benefit of residents, as such monitoring is contemplated in Clause 8(e). However, the imposition of the regulatory requirement to achieve the TRS limits imposed in Clauses 8(e) to 8(f) is unreasonable.

Northern Pulp requests that Clauses 8(d) and 8(f) be removed entirely and that Clause 8(e) be revised to impose only a requirement that Northern Pulp test TRS in accordance with Table 6.
C. Effluent Flow Reduction Requirements – Clauses 5 and 6(a)

The reductions in Clauses 5 and 6 of the Approval are inconsistent. As water use and effluent flow are directly related in terms of the Mill's mass balance, the water use restrictions outlined in Clause 5 of the Approval effectively restrict the effluent limit contained in Clause 6(a) of the Approval to less than 67,500 m3/day or 77.3 m3/Adt. The effect of the water use restrictions in Clause 5 is to impose a greater effluent flow reduction requirement than the Department requires in Clause 6(a).

The AMEC Report (p. 25-26) indicates that consumptive water use (water taken but not returned as effluent) with the power boiler scrubber in operation is estimated at approximately 2 m3/Adt. In essence, from a mass balance perspective, Clause 5(d) is more stringent and practically translates to an effluent limit of 70.1 m3/Adt (72.2 – 2) or 61,200 m3/day. This represents a further reduction of 6,300 m3/day or an additional 9%. The McCubbin Report indicates that the net water consumption of 2 m3/Adt is very conservative and could be as high as 5 m3/Adt, which could lead to even further reduction requirements. KS-I indicates that 8% of incoming water supply to the mill would be lost to evaporation. All three consultants (AMEC, Neil McCubbin and KSH) support this reduction of an additional 9-10%.

In addition to the arguments set out in Section IV.A above, the water use restrictions in Clause 5 are unreasonable because they impose conditions that are more onerous than the effluent control limits in Clause 6(a) of the Approval. Therefore, Northern Pulp requests that the water use restrictions in Clause 5 be removed.

D. COD Limits – Clauses 6(d) to 6(j)

The COD limits in Clauses 6(d) to 6(j) of the Approval are based on the outdated AMEC Report and are unreasonable.

Table II below summarizes the Mill COD data at several locations in the treatment plant.

<table>
<thead>
<tr>
<th>Location</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point A</td>
<td>154.6</td>
<td>124.7</td>
<td>103.5</td>
<td>123.4</td>
<td>99.6</td>
<td>92.2</td>
<td>82.5</td>
<td>87.8</td>
</tr>
<tr>
<td>Point C</td>
<td>71.7</td>
<td>82.3</td>
<td>76.7</td>
<td>70.1</td>
<td>63.1</td>
<td>56.0</td>
<td>53.6</td>
<td>51.4</td>
</tr>
<tr>
<td>Point D</td>
<td>74.0</td>
<td>78.6</td>
<td>71.3</td>
<td>65.1</td>
<td>62.8</td>
<td>56.0</td>
<td>55.2</td>
<td>50.8</td>
</tr>
</tbody>
</table>

The improvements in COD intensity beginning in 2011 reflected in Table II are in part the result of the Green Transformation Projects carried out by the Mill that year. Continuous improvement initiatives at the Mill have continued to provide COD reduction through to 2014.

Since the AMEC Report was written, many of the proposed projects for effluent quality improvements identified in the Report have been completed, including: improvements to brown stock washing including two new washer drums and closing of the screen room with true counter-current washing, recycle of PM rejects, Stage 1 DNCG system, sludge removal plan, PB scrubber and a new emergency spill tank. A COD reduction of 30% has been achieved from the 2007 benchmark conducted in the AMEC Report.
Although not clearly stated, Northern Pulp has assumed that the COD reductions in Clause 6(e) of the Approval are based on the five year annual average COD at Point A that was reported pursuant to Clause 6(d).

Northern Pulp's average COD intensity at Point A for 2010 through 2014, as requested in Clause 6(d), is 97.1 kg/Adt. At 873 Adt/day\(^7\), the daily discharge would be 84,800 kg/day. The 50% reduction in COD required by Clause 6(e) would mean a daily discharge of 42,400 kg/day at Point A.

There is very little published data for COD in North America, and virtually nothing from the United States. Data that is published, and all third party data presented in this Appeal, refer to "after treatment" and would be comparable to Point C in the above Table I, not point A (the inlet to treatment).

The Department has recently made statements in media interviews that Northern Pulp has four times greater COD than mills of similar size. This is clearly wrong. The following graph is an excerpt from the FPAC Report. With 16 out of a possible 30 mills in Canada reporting, this graph shows that Northern Pulp clearly does not have four times greater COD than mills of similar size, nor does it have the highest COD discharge.

![Graph: 2013 - FPAC Treated Effluent COD Intensity - Mills in Category 1 Chemical Market Pulp (excluding DIP/Repulp)]

The AMEC Report indicates (on p. 29) that benchmarking of effluent was done using the widely accepted EKONO study of September, 2007, which is based on 2005 data. The enclosed EKONO Memo compares COD and BOD data from Northern Pulp to the results found in the EKONO database. The EKONO benchmarking and analysis of the new COD limits concludes

\(^7\) 310,000 Adt/year at 355 days is 873 Adt/day at the end of the Approval, assuming that the Mill is able to increase production to this limit by that time.
that the two lowest COD discharge mills are hardwood mills with oxygen delignification, modified cooking, condensate stripping, etc. and the lowest COD discharge in a Canadian bleached softwood kraft pulp mill in the database is 28-30 kg/Adt. The EKONO Memo also concludes that more than 40% of the North American bleached market kraft pulp in 2013 was produced by mills with BOD discharges higher than those at Northern Pulp’s Mill. This proves once again that the Department is not working with current data and does not understand the influences of mill process equipment and wood species on COD.

It is clear that the Department was relying on outdated studies and analysis in setting the COD limits in Clause 6. This is based on outdated data and is unreasonable. Therefore, Northern Pulp requests that Clauses 6(d) to 6(j) be removed.

E. Production Limit – Clause 4(a)

Clause 4(a) of the Approval limits the maximum production rate of the Mill to 310,000 Adt/yr. Not only does this Clause prohibit the Mill’s future expansion, it also offers no additional environmental benefit. The production capacity of the Mill is and should properly be limited by the existing equipment of the Mill and the other requirements of the Approval. So long as Northern Pulp is in compliance with the other requirements of the Approval, whatever the Mill’s production limit happens to be when it complies with those requirements has no environmental relevance.

There is no additional environmental basis or additional public benefit for including in the Approval a provision that arbitrarily limits the production of the Mill. Northern Pulp therefore requests that Clause 4(a) be removed entirely.

F. Phenanthrene Testing – Clause 12(ag)

Clause 12(ag) requires semi-annual testing of Phenanthrene at Surface Water station SW12-3. The trend analysis requested is not warranted because the measurement was at or near the detection limit. See enclosed Dillon Consulting Memo\(^a\). The requirement of Clause 12(ag) therefore has no justification. It only adds cost to Northern Pulp with no corresponding additional benefit to the environment. The requirement in Clause 12(ag) is therefore unreasonable and Northern Pulp requests that it be removed.

G. Daily Limits for Water and Effluent Usage – Clauses 5(d), 5(e), 6(a) and 6(b)

The reference to water and effluent usage in the Approval in terms of daily limits is contrary to the way that effluent data is compared and benchmarked in the industry. See the AMEC Report and the enclosed EKONO Memo, FPAC Report, KSH Memo, McCubbin Report, and Klopping Report. As stated in the KSH Memo at p. 5, “Effluent flow restrictions are usually stated on an average basis, usually monthly or annually since there is no measurable risk to the environmental [sic] by one day of effluent flow above a certain amount.”

The imposition of daily limits for water usage that do not consider seasonality are of particular concern to the Mill. Based on data from the last three years, the Mill’s water intake has peaked at 87,000-91,000 m3/day (23-24 million gallons/day), even though the Mill’s annual average water usage is 75,000 m3/day (20 million gallons/day). These peak days do not occur during the highest surface run-off months. Rather, they historically occur during the hottest days

\(^a\) Letter from Dillon Consulting Limited dated February 11, 2015 (“Dillon Consulting Memo”).
during the summer when the incoming Middle River water is at its warmest and cooling systems are most heavily loaded. Cooling towers will be an essential component of water reduction that will recycle "once-through" cooling water for re-use. Cooling towers are driven by temperature differential (water to ambient air) and relative humidity and are a very effective means of cooling. However, heat transfer during hot, humid spells can be challenging. The cooling towers offer significant water reduction on an annual basis, but daily reductions will be highly influenced by weather. It is therefore clear that the Mill will not be able to operate and comply with the daily water usage requirements of the Approval on certain days of the year. Therefore, daily limits on water usage are unreasonable as they effectively preclude the Mill from operating on a consistent basis.

There is no environmental reason to impose a daily limit in Northern Pulp's circumstances. Northern Pulp therefore requests that all water and effluent usage restrictions in the Approval, including Clauses 5(d), 5(e), 6(a) and 6(b), be revised to be based on yearly averages, not daily limits.

H. PM₃₀ Contributors – Clauses 9(a) to 9(e)

Clauses 9(a) to 9(e) of the Approval transform the voluntary objectives of the Canadian Ambient Air Quality Standards ("CAAQS") into mandatory compliance requirements without any consideration given to other local sources of PM₃₀, especially other local heavy industry, wood-burning stoves and other non-commercial sources, or the not insignificant contribution of interprovincial and international transport of PM₃₀ from other sources.

It is unreasonable to require the Mill's mandatory compliance with the limits in the CAAQS without taking into account other industrial facilities, residential sources and transportation that are also contributors to PM₃₀ in the area. See KSH Memo, p. 16-18. As the Mill's compliance with Clauses 9(a) to 9(e) is outside of the Mill's own control, such mandatory compliance requirements are unreasonable.

Northern Pulp is confident that the Mill will meet these limits as a contributor; however, imposing mandatory compliance on the Mill without taking into account other contributors is unreasonable. Northern Pulp therefore requests that Clauses 9(a) to 9(e) be revised to acknowledge that Northern Pulp is only required to demonstrate that its relative contribution to the local air quality meets the limits of the CAAQS.

I. Particulate Limit – Clause 9(h)

Clause 9(h) imposes a regulatory limit on the Recovery Boiler for particulate of 77 mg/Rm³ @ 11% O₂. We understand, based on discussions with the Department, that this limit is based on the performance expected by the manufacturer of the new electrostatic precipitator ("ESP"). This limit does not properly take into consideration the variables that can affect actual boiler performance on a day-to-day basis, particularly in the case of a new ESP attached to an existing boiler. Contrary to North American regulatory convention, the approach taken by the Department in setting the particulate limit for the Recovery Boiler treats the installation of the new ESP as if it were a significant modification to an existing boiler and, as such, treats it as a new boiler and sets emission limits that are in line with such units: KSH Memo, p. 21-22. This is inconsistent with the approach taken in most North American jurisdictions. For example, under the U.S. Air Quality Regulations, the addition and/or replacement of pollution control equipment, such as a new ESP, is not, in itself, considered to be a modification to an existing boiler, and would not result in treating such existing boiler as if it were a new boiler for the purposes of
setting a particulate limit. As the particulate limit imposed by Clause 9(h) fails to recognize that the ESP is being connected to Northern Pulp’s existing boiler system and the variables that can affect the performance of that boiler system on a day-to-day basis, Clause 9(h) is unreasonable.

The limit imposed on Quebec’s existing recovery boilers of 153.5 mg/Rm³ @ 11% O₂ represents a more reasonable and appropriate limit, as it represents state-of-the-art performance for a boiler and direct contact evaporator system of the same vintage as Northern Pulp’s boiler. See KSH Memo at p. 18-22. Northern Pulp therefore requests that Clause 9(h) be revised accordingly.

J. Middle River Study – Clause 5(f)

Clause 5(f) makes Northern Pulp responsible for conducting a maximum sustainable yield study of the Middle River watershed. In the 47 years of the Mill’s operation, neither the Department nor any other stakeholder has ever raised a concern about water usage impacts on the Middle River watershed. The Michelin, Granthor facility also draws its fresh water supply from the Middle River and discharges its effluent back into Middle River upstream of the Mill’s water supply. As well, the river is dammed to prevent salt water intrusion and the spillway dam is controlled by the Province. See KSH Memo at p. 2. No low-level warnings have ever been communicated to the Mill.

In addition, the December 15, 2015 deadline does not allow for a full year study to cover all seasons which would be normal for this type of assessment, implying that existing data must be used. The responsibility of Northern Pulp to conduct this maximum yield study of the watershed (which is usually directed towards new applicants for a water removal permit) is unreasonable, especially considering the Mill does not have access to or control of pertinent data that would be required to properly complete this study.

Northern Pulp therefore requests that Clause 5(f) be removed.

K. Waste Dangerous Goods – Clause 4(i)

Northern Pulp requests that Clause 4(i) be revised to replace the words “all wastes generated” with “all waste dangerous goods generated” in order to clarify this Clause and ensure its consistency with the preceding Clause 4(h), which deals only with waste dangerous goods.

L. TRS Reporting – Clause 7(m)(i)

The monthly reporting requirement for TRS in Clause 7(m)(i) is internally inconsistent with the reporting requirement for TRS in Table 6 of Appendix A. Clause 7(m)(i); should therefore be amended to include an exception for TRS reporting of every three months.

M. Cardlock Facility Wells – Clauses 12(a) and 12(g)

The Approval at Clause 12(a) requires Northern Pulp to maintain the Cardlock Facility Wells. The Cardlock Facility Wells are owned and operated by Parkland Fuels. Northern Pulp has permission from Parkland Fuels to sample the Wells, but the maintenance of the Wells is not under the control of Northern Pulp. Further, Clause 12(g) requires Northern Pulp to maintain records, including borehole logs, construction details and maintenance records, in respect of the Cardlock Facility Wells. This information is the property of Parkland Fuels and Parkland Fuels has no obligation to provide it to Northern Pulp.
Clauses 12(a) and 12(g) are unreasonable to the extent that these Clauses impose an obligation on Northern Pulp to maintain Wells which are not under Northern Pulp’s ownership or control and require Northern Pulp to maintain with respect to those Wells records of information to which Northern Pulp is not entitled. Northern Pulp therefore requests that Clauses 12(a) and 12(g) be revised accordingly.

N. Surface Water Stations – Clause 12(ad)

Several of the Surface Water stations listed do not exist, while other new stations are not listed in Clause 12(ad). See enclosed Dillon Consulting Memo. Northern Pulp requests that this Clause be revised accordingly.

O. Stantec Report – Clause 12(au)

Clause 12(au) is inaccurate as it refers to the Stantec “Hydrogeological and Hydrological Evaluation of the Boat Harbour Treatment Facility Report” as being dated April 30, 2012. Rather, the Report is dated September 28, 2011. Northern Pulp requests that this Clause be revised accordingly.

V. Inconsistency with FOIPOP – Clause 22

The requirements in Clause 22 of the Approval that Northern Pulp provide information to the Pictou Landing First Nation (“PLFN”), including a copy of all reporting information and reports that are required to be submitted under the Approval, is inconsistent with the protection granted to Northern Pulp under FOIPOP. The public accessibility to information under the control of the Department under section 10 of the Environment Act is subject to the important restrictions of FOIPOP: section 10(2) of the Act.

Specifically, section 21 of FOIPOP provides that a head of a public body (such as the Minister and Administrator of the Department of Environment) must refuse to disclose information:

(a) That would reveal

(i) trade secrets of a third party, or
(ii) commercial, financial, labour relations, scientific or technical information of a third party;

(b) That is supplied, implicitly or explicitly, in confidence; and

(c) The disclosure of which could reasonably be expected to

(i) harm significantly the competitive position or interfere significantly with the negotiating position of the third party,

[...]

(iii) result in undue financial loss or gain to any person or organization, or

Much of the information required to be provided by Northern Pulp to the Department constitutes commercial, financial and technical information. That information is supplied to the Department in confidence. The disclosure of this information could reasonably be expected to harm both
Northern Pulp's competitive position as well as its negotiating position with respect to an action that has been brought by PLFN against Northern Pulp. The competitive position of Northern Pulp would be harmed because its competitors in a global market and others having interests adverse to Northern Pulp would become fully aware of the Northern Pulp's commercially sensitive information.

Requiring Northern Pulp to comply with Clause 22 of the Approval is contrary to Section 10 of the Environment Act and Section 21 of FOIPOP. The Department through the Approval is circumventing the due process provided for under FOIPOP and the procedural fairness afforded to Northern Pulp with respect to the release of Northern Pulp's confidential and commercially sensitive information to third parties. The Department cannot by administrative fiat overcome a legislative requirement. Clause 22 of the Approval therefore is an unreasonable and ultra vires condition imposed by the Department. Accordingly, Northern Pulp requests that Clause 22 of the Approval be removed entirely.

Northern Pulp hereby confirms that any documents submitted by Northern Pulp to the Department at any time, including but not limited to this Appeal and its enclosures, are being submitted with the expectation that the Department will observe the protections afforded to Northern Pulp by FOIPOP in respect of such documents.

**CONCLUSION**

In light of the above, Northern Pulp respectfully requests that you exercise your powers under Section 137(4) of the Act to allow Northern Pulp's Appeal and remove or revise the provisions of the Approval as outlined in this letter.

Yours truly,

Terri Fraser, Technical Manager
Northern Pulp Nova Scotia Corporation

Encl.⁹

1. KSH Memo, Ken Frei and Guy Martin Resumes
3. EKONO Memo, Heikki Mannisto and Eva Mannisto Resumes
4. Klopping Report, Paul Klopping Resume
5. Dillon Consulting Memo
6. FPAC Report

cc: Bruce Chapman, Northern Pulp (via email)
cc: Dave Davis, Northern Pulp (via email)

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⁹ The enclosures refer to Approval No. 2011-076657-R03 but remain valid with respect to the Appeal.