IN THE MATTER OF Chapter 1 of the Acts of Nova Scotia 1994-95, the *Environment Act*

- and -

IN THE MATTER OF an Order issued pursuant to Section 125 of said Act to Northern Pulp Nova Scotia Corporation at or near 260 Granton Abercrombie Road, Abercrombie Point, Abercrombie, Pictou County, Nova Scotia.

MINISTERIAL ORDER

- I. WHEREAS Northern Pulp Nova Scotia Corporation, hereafter called "NPNSC", owns, occupies, operates or is responsible for the operation of a plant, structure, facility, undertaking or thing, to wit: a former bleached kraft pulp mill and all of its associated works which is located at or near 260 Granton Abercrombie Road, Abercrombie Point, Abercrombie, Pictou County, Nova Scotia, hereafter called the "Site":
- II. AND WHEREAS NPNSC operated the Site under Approval #2011-076657-A01 until its expiry on January 30th, 2020;
- **III. AND WHEREAS** the Minister of Environment and Climate Change believes on reasonable and probable grounds that the persons named in this Ministerial Order have contravened or will contravene the:

Environment Act

- s. 50(2) No person shall commence or continue any activity designated by the regulations as requiring an approval, unless that person holds the appropriate class of approval required for that activity;
- **IV. AND WHEREAS** the Minister is of the opinion that it is in the public interest to do all things and take all steps necessary to comply with the *Environment Act* or to repair any injury or damage, or to control, eliminate or manage an adverse effect;

IT IS HEREBY ORDERED:

That upon service of this Ministerial Order and pursuant to subsection 125(1) of the *Environment Act*, the persons named in this Ministerial Order shall, at their own cost, comply with the terms and conditions, including compliance times, set forth in Schedule "A" attached to and forming part of this Ministerial Order.

AND TAKE NOTICE if the persons to whom the Ministerial Order is directed fail to comply with the Ministerial Order, or any part thereof, the Minister, pursuant to Section 132(2) of the *Environment Act*, may take whatever action the Minister considers necessary to carry out the terms of the Order and may recover any reasonable costs, expenses and charges incurred by the Minister pursuant to Section 132 of the *Environment Act*.

AND FURTHER TAKE NOTICE that the appeal provisions respecting the issuance of a Ministerial Order are more fully outlined in Section 138 of the *Environment Act*, including a 30-day time period from the date of the issuance of the Ministerial Order to file an appeal.

ISSUED at Halifax, in the Halifax Regional Municipality, Province of Nova Scotia, this <u>28th</u>day of <u>May</u> 20<u>21.</u>

The Honourable Keith Irving
Minister of Environment and Climate Change

SCHEDULE "A" TERMS AND CONDITIONS Northern Pulp Nova Scotia Corporation

- 1. NPNSC shall operate the Facility in accordance with the Environment Act S.N.S. 1994-1995, c.1 and its Regulations, as amended from time to time.
- 2. NPNSC shall comply with all terms of Ministerial Order #55774, dated the 29th day of January, 2020, and Ministerial Order #60003, dated the 14th day of May, 2020, signed by Minister Wilson, unless otherwise stated in this Schedule A or until such time as Ministerial Orders #55774 and # 60003 are revoked.
- 3. Unless otherwise notified in writing by the Minister, the contact person at the Department to receive any correspondence relating to this Order is:

Manager of Special Projects Kathleen Johnson, P.Eng. Nova Scotia Environment and Climate Change 20 Pumphouse Road Granton, Nova Scotia B2H 5C6

Definitions

- 4. All definitions in expired Approval #2011-076657-A01 and Minister Miller's Appeal Decision letter, dated February 8, 2016, are applicable in this Order with the exception of the definition of Facility. Until June 1st, 2021, the definition of Facility in Approval #2011-076657-A01 will apply. As of June 1st, 2021, for the purpose of this Ministerial Order only, Facility means any property, building, structure, processing facility, pollution abatement system, stockpile, industrial landfill or other infrastructure associated with the operation of a Kraft Pulp Mill at 260 Granton Abercrombie Branch Road, Abercrombie Point, Abercrombie, PID 00864538 and includes the ambient air monitoring station located at Green Hill, PID 00844233, Pictou County.
- 5. Bulk Storage, for the purpose of this Order, means the storage of liquids, such as petroleum products and chemicals in tanks, as distinguished from drum or packaged storage.

- 6. Decommissioning, for the purpose of this Order, means to make inoperative, empty, purge, decontaminate and secure to ensure no adverse impact to the environment may occur.
- 7. Hibernation, for the purpose of this Order, means to prepare for an extended period of inactivity or non-use.
- 8. Pulping Liquor, for the purpose of this Order, means black liquor, green liquor and white liquor.
- 9. Mill Site, for the purpose of this Order, means the property and associated works, located at 260 Granton Abercrombie Branch Road, Abercrombie Point, Abercrombie, PID 00864538.

Facility Production and Maintenance

10. NPNSC shall not produce pulp until such time as an Industrial Approval to Operate is obtained from the Department.

Wastewater

- 11. NPNSC shall ensure all potentially impacted stormwater and landfill leachate generated at the Facility is collected and transported to a facility that is Approved to treat the constituents in the wastewater unless otherwise authorized by the Department in writing.
- 12. Records of shipment and receipt by the treatment facility shall be maintained for a minimum of two years after all shipments cease.
- 13. Records of shipments shall be submitted to the Department on a quarterly basis within 30 days of the end of the reporting period.

Effluent Pipeline and Associated Infrastructure

14. NPNSC shall monitor the effluent pipeline as outlined in the NPNSC *Effluent Pipe Spill or Rupture Emergency Response Plan*, submitted December 17, 2020 until such date when the Province of Nova Scotia agrees to accept responsibility for the monitoring. NPNSC shall provide confirmation in writing from the agent of the Province of Nova Scotia of such acceptance, including the date of transfer.

Air Emissions

- 15. NPNSC shall generate no emissions from the Power Boiler.
- 16. NPNSC shall ensure any emissions from the Facility do not contribute to an exceedance of the maximum permissible ground level concentrations specified in Schedule A of the Air Quality Regulations.

Hydrology and Hydrogeology

- 17. NPNSC shall sample and analyze the groundwater and surface water monitoring network at the NPNSC Mill Site in accordance with Table 1, Appendix A.
 - Results of all quarterly testing for surface water at the mill site shall be submitted to the Department within 30 days of receipt from the laboratory.
 - b. A report detailing the monitoring program and interpretation of the lab results must accompany the quarterly results.
- 18. NPNSC shall ensure that all surface water discharged from the Mill Site meet the limits in Table 2 in Appendix A. This includes the following surface water monitoring stations: SW5, SW6, SW11, SW12, SW13, SW12-1, SW12-2, and SW12-3.
- NPNSC shall ensure all surface and ground water samples are collected in a consistent manner in accordance with established industry standards and best practices.
- 20. The monitoring well network at the Mill Site shall be visually inspected during each field visit and maintenance performed, as required. The monitoring wells shall be fitted with a protective well casing and secured.
- 21. The Department reserves the right to modify groundwater or surface water monitoring locations, parameters and frequency, and to require remedial measures based on the change of site activities, results of monitoring data and/or site inspections.
- 22. NPNSC shall not modify, (addition, deletion or replacement), the groundwater or surface water monitoring program, including locations, parameters, or frequency, without written authorization from the Department. Any request to modify the groundwater or surface water monitoring program shall be submitted to the Department in writing, including justification for the change(s), prepared by a

- qualified professional, licensed to practice in Nova Scotia by Geoscientists Nova Scotia (APGNS) or Engineers Nova Scotia (APENS).
- 23. NPNSC shall submit any request for modification to the groundwater or surface water monitoring program a minimum of thirty (30) days prior to the proposed implementation of the modification.
- 24. NPNSC shall review the groundwater and surface water quality monitoring data as it is collected in order to identify potential changes in water chemistry associated with mill activities. Any change in groundwater quality shall be reported immediately to the Department.
- 25. NPNSC shall maintain records for all groundwater monitoring wells and production wells at the Mill Site, including but not limited to borehole logs and construction details, and maintenance records for a minimum of 15 years.
- 26. NPNSC shall submit an Annual Report for the groundwater and surface water monitoring at the Mill Site to the Department by April 1st, of the year following monitoring. The Annual Report shall include, but is not limited to, the following information:
 - a. a review of field methodologies, including sampling techniques;
 - b. a description of the current groundwater monitoring network;
 - c. a description of the current surface water monitoring network;
 - d. a review of the current groundwater and surface water monitoring programs and recommendations for modifications, as applicable;
 - e. summary of any deficiencies noted during the visual inspections of the monitoring well networks and a summary of the required and completed maintenance, as required;
 - f. current and historical static water level data in tabular format;
 - g. groundwater gradients and flow direction.
 - h. current and historical groundwater quality data in tabular format with comparison to applicable guidelines and historical data;

- i. current and historical surface water and leachate quality data in tabular format with comparison to applicable guidelines and historical data;
- j. laboratory certificates of analysis;
- k. a detailed interpretation of the groundwater, surface water and leachate quality data including an analysis of spatial and temporal trends; and
- I. the identification of any adverse impacts to groundwater and/or surface water and associated recommendations, as applicable.
- 27. The annual report shall be prepared by or under the direction of a qualified professional licensed to practice in Nova Scotia by Geoscientists Nova Scotia or Engineers of Nova Scotia.
- 28. NPNSC shall ensure that the following discharge limits for suspended solids are met for any water which is discharged from the Site to a watercourse or wetland at the Site:

Clear Flows (Normal Background Conditions):*

- a. Maximum increase of 25 milligrams/litre from background levels for any short-term exposure (24 hours or less)
- Maximum average increase of 5 milligrams/litre from background levels for longer term exposure (inputs lasting between 24 and 30 days)

High Flow (Spring Freshets and Storm Events):*

- c. Maximum increase of 25 milligrams/litre from background levels at any time when background levels are between 25 milligrams/litre and 250 milligrams/litre
- d. Shall not increase more than 10% over background levels when background is > 250 milligrams/litre

CCME Environmental Quality Guideline for Aquatic Life, as amended.

Registered Public Drinking Water Supply

29. NPNSC shall register as a Public Drinking Water Supply if the facility meets the definition of as detailed in the Water and Wastewater Facilities and Public Drinking Water Supplies Regulations.

Dangerous Goods

- 30. NPNSC shall continue to follow the accepted Dangerous Goods management plan submitted April 30, 2020.
- 31. NPNSC shall not store bulk Dangerous Goods or Waste Dangerous Goods at the Facility unless, and until, an Approval is obtained under the Activities Designation Regulations first. Please note, all storage, handling and secondary containment required under the Dangerous Goods Management Regulations must be met.

Petroleum Management

32. NPNSC shall not store bulk petroleum products in any tanks which are in hibernation which are regulated under the Petroleum Management Regulations at the Facility after April 30, 2020 unless an Approval is obtained under the Activities Designation Regulations first. Please note, all storage, handling, piping and secondary containment required under the Petroleum Management Regulations must be met.

Industrial Landfill

- 33. NPNSC is strictly prohibited from disposing of domestic solid waste in the industrial landfill(s). All domestic solid waste shall be disposed of at a facility licensed or approved for the recycling, composting or disposal of such solid waste.
- 34. NPNSC is strictly prohibited from disposing of petroleum impacted soil at the industrial landfill. All petroleum impacted soils must be disposed of at a licensed or approved for the treatment or disposal for such waste.
- 35. NPNSC is restricted to dispose of only the industrial waste types for which the industrial landfill was designed, as identified in the Landfill Operations Manual, dated December 1989 and Solid Waste Management Strategy Background Report, dated November 1989, at the industrial landfill.

36. NPNSC shall ensure the Landfill Closure Plan, submitted June 15, 2020, is implemented. Any changes to the approved plan shall be submitted to the Department for review and approval no less than 30 days in advance of proposed implementation.

Asbestos Disposal

- 37. NPNSC shall ensure the asbestos waste disposal area is limited to the area outlined in the location survey submitted March 31, 2020.
- 38. Abandonment or discontinuance of use of the designated asbestos waste disposal area requires a final capping material having a depth of not less than one hundred twenty-five (125) centimetres with a permeability of not greater than 10⁻⁶.
- 39. NPNSC shall ensure clear permanent signage marks the location of the asbestos disposal area and the area is secured from unauthorized access by no later than May 29, 2020.

Boat Harbour Effluent Treatment Facility Transition

- 40. NPNSC shall ensure all surface and groundwater monitoring of the BHETF, required under Ministerial Order #55774 and Ministerial Order #60003, be completed for the first and second quarter of 2021.
- 41. NPNSC shall submit the results of the testing required under Condition 40 of this Ministerial Order within 30 days of the end of the quarter.
- 42. NPNSC shall ensure all monitoring locations are identified and access to groundwater monitoring wells is provided to Nova Scotia Lands by no later than June 1st, 2021.
- 43. NPNSC shall operate and maintain the ambient air monitoring station and monitors located at Pictou Landing (PID 65006785) in accordance with Condition 29 and Condition 30 of Ministerial Order #60003 until June 1st, 2021.
- 44. NPNSC shall submit a summary report of the data collected under Condition 43 of this Order by no later than July 15, 2021. This summary report shall contain the information associated with April and May of the second quarter, outlined in Condition 32 of Ministerial Order #60003.
- 45. For the period of monitoring from January 1st, 2021 until June 1st, 2021, NPNSC shall demonstrate compliance with Conditions 26 and 27 of Ministerial Order

- #60003 by utilizing the ambient air quality data collected from the ambient air quality station identified in Condition 43 of this Ministerial Order.
- 46. NPNSC shall ensure the operation of the ambient air monitoring station and equipment, necessary for the continued monitoring of the air emissions from the BHETF, located at the Pictou Landing (PID 65006785) is transitioned to Nova Scotia Lands for their use by no later than June 1st, 2021.
- 47. NPNSC shall monitor wastewater at Point C in accordance with Condition 19 of Ministerial Order #60003 until June 1st, 2021.
- 48. NPNSC shall monitor Point D in accordance with Condition 20 of Ministerial Order #60003 until June 1, 2021.
- 49. NPNSC shall submit the results of monitoring conducted under Conditions 47 and 48 of this Ministerial Order within 30 days of the final month of monitoring.
- 50. NPNS shall provide Nova Scotia Lands access to the NPNS assets required to operationally manage the ASB, and undertake work required to manage environmental issues in the ASB, by no later than June 1st, 2021.

Communication Plan

51. NPNSC shall maintain the Mi'kmaq Communication Plan for the purposes of sharing information with the Pictou Landing First Nation on environmental or any other issues as directed by the Department.

Insurance

52. NPNSC, at its own expense, must purchase and maintain in full force during the period of operation, insurances to protect itself, its contractors and subcontractors, the Department, the Corporation, their successors and assigns and their respective directors, officers, council members, employees, agents and servants involved in the operation and reclamation of a Bleached Kraft Pulp Mill.

Such insurance shall provide coverage for all environmental risks associated with the operation of the Facility and shall protect the Department, the Corporation, their successors and assigns, and their respective officers, directors, council members and employees from all claims arising out of liability for environmental impairment. All policies shall be issued by financially sound insurers licensed to carry on business in Canada and shall be subject to review by the Department. All policies shall be non-cancellable, except for violation of statutory law which places the Insurer in violation of the laws of its place of domicile or threatens its solvency.

All operation, reclamation period insurance policies, as accepted by the Department, shall be maintained valid for the period of this Ministerial Order. Proof of insurance to be submitted annually by January 31.

- 53. This insurance will include the following provisions:
 - a. a policy limit of liability of not less than \$10 million per occurrence;
 - b. "Her Majesty the Queen in the Right of the Province of Nova Scotia as represented by the Minister of Environment" named as "Additional Insured":
 - c. this approved Facility shall be included on the policy in its description of operations;
 - d. waiver of Insurer's rights of subrogation against Nova Scotia;
 - e. breach of any terms or conditions of the policy, or negligence or willful act or omission or false representation by an Insured or any other person, shall not invalidate the insurance with respect to Nova Scotia;
 - f. 90 days prior written notice of cancellation or material change from Insurer to the Department;
 - g. Gradual and sudden pollution coverage for all insured perils;
 - h. Government- ordered clean up expenses coverage;
 - i. Waste materials coverage; and
 - j. Products Hazard & Completed Operations, Pollution Coverage.
- 54. Following a review by the Department, the Department may require NPNSC to make a change in the coverage required.

55. NPNSC shall notify the Department in advance of any change that is not addressed in this Order, as an Approval may be required.

Appendix A

Table 1: NPNSC Mill Site – Groundwater and Surface Water Monitoring Requirements

Location*	Frequency	Parameters			
Industrial Landfill Mon	Industrial Landfill Monitoring Network				
Groundwater					
1 (B)					
2 (A,B)					
4 (A,B)					
09-1 (A)					
96-1 (B)		Canada Chamiston Mastala Elvavida			
96-2 (B)	Semi-Annual (Spring and Fall)	General Chemistry, Metals, Fluoride			
09-2 (C)		Water Level			
09-3 (B)					
96-3 (C)					
Construction Gate Well					
Scale House Well					
1 (A,C)					
3 (A,B,C)					
4 (C)					
5 (A,B)		General Chemistry, Metals, Fluoride			
6 (A,B)	Annual (Fall)	Water Level			
7 (A,B,C)					
8 (B)					
9 (A,C)					
09-1 (A)					
96-1 (B)	Annual (Fall)	VOCa BALLA			
96-2 (B)	Annual (Fall)	VOCs, PAHs			
09-2 (C)					
4 (A,B)					
5 (A,B)	Applied (Fall)	TDU and DTEV			
6 (A,B)	Annual (Fall)	TPH and BTEX			
7 (A,B,C)					
7 (A,B,C)					
09-1 (A)					
96-1 (B)					
96-2 (B)	Annual (Fall)	Mercury			
09-2 (C)					
09-3 (B)					
96-3 (C)					

Location*	Frequency	Parameters
Surface Water		
SW2 SW4 SW9	Semi-Annual (Spring and Fall)	General Chemistry, Metals, Fluoride DOC, dissolved Zn, TSS, COD/BOD TPH/BTEX
SW10 SW13	Annual (Fall)	Mercury
SW5 SW6 SW11	Quarterly	General Chemistry, Metals, Fluoride DOC, Dissolved Zn, TSS, COD/BOD TPH/BTEX
SW12	Annual (Fall)	Mercury
SW5 SW6 SW11 SW12	Quarterly	Cr ³⁺ and Cr ⁶⁺
SW13	Semi-Annual (Spring and Fall)	
Leachate		
Leachate	Quarterly	General Chemistry, Metals, Fluoride TSS, COD/BOD, TPH/BTEX, Cr ³⁺ and Cr ⁶⁺ Mercury, Flow rate
Mill Monitoring Netwo	ork	
Groundwater		
MW12-1 MW12-2	Semi Annual (Spring and Fall)	General Chemistry, Metals, Fluoride, Water Level
MW12-3 MW12-4 MW12-5R MW12-6R	Annual (Fall)	ТРН/ВТЕХ
MW12-1 MW12-2 MW12-4 MW12-5R MW12-6R	Annual (Fall)	PAHs
Cardlock Facility Wells: Well A Well B Well C Well D	Annual (Fall)	General Chemistry, Metals, Fluoride TPH/BTEX, Water Level

Surface Water				
SW12-1 SW12-2 SW12-3	Quarterly	General Chemistry, Metals, Fluoride DOC, Dissolved Zn, TSS, COD/BOD TPH/BTEX, Cr ³⁺ and Cr ⁶⁺		
	Annual (Fall)	Mercury		

Table 2: Surface Water Discharge Limits

PARAMETER	DISCHARGE LIMIT
pH	6.5 - 9.0
Total Petroleum Hydrocarbons	3.5 milligrams per litre or Atlantic RBCA*
Chromium (trivalent)	8.9 micrograms per litre
Chromium (Hexavalent)	1.0 micrograms per litre
Copper	2-4 micrograms per litre
Iron	300 micrograms per litre
Nickel	25-150 micrograms per litre
Vanadium	2 milligrams per litre
Dissolved Zinc	Refer to the guideline calculation in the latest version of the CCME Freshwater Aquatic Life Guidelines (2018)

^{*} lowest value after finalization of Atlantic RBCA standard for surface water