

EXHIBIT NL-12



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Environment and Conservation

CERTIFICATE OF APPROVAL

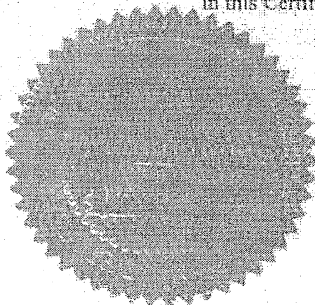
Pursuant to the Environmental Protection Act, SN 2002 c E-14.2 Section 83

Issue Date:	January 6, 2005	Approval No. AA05-015441
Expiry Date:	October 15, 2006	File No. 722.626.1
Proponent:	Abitibi-Consolidated Company of Canada - Grand Falls Division P.O. Box 500 Grand Falls, NF A2A 2K1	
Attention:	Geoff Clarke, Production Manager William Browne, Human Resources Manager	
Re:	Abitibi-Consolidated Company of Canada - Grand Falls Division	

Approval is hereby given for the operation of a pulp and paper mill, using a thermal mechanical pulping process, including woodyard and effluent treatment plant, located at Grand Falls-Windsor, Newfoundland.

This Certificate of Approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Approval from the Minister shall be obtained prior to any significant change in the design, construction, installation, or operation of the facility, including any future expansion of the works. This Certificate of Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This Certificate of Approval is subject to the Terms and Conditions as contained in Appendix "A" attached hereto, as may be revised from time to time by the Minister. Failure to comply with any of the Terms and Conditions may render this Certificate of Approval null and void, may require the proponent to cease all activities associated with this Certificate of Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Minister. The Minister reserves the right to add, delete or modify the Terms and Conditions to correct errors in this Certificate of Approval or to address significant environmental or health concerns.



MINISTER

Appendix A

Terms and Conditions for Approval No. AA05-015441
January 6, 2005

General

1. This Certificate of Approval is for the operation of a pulp and paper mill, using a thermal mechanical pulping process, including woodyard and effluent treatment plant, located at Grand Falls-Windsor, Newfoundland. Future modification or expansion may require an amendment to this Approval or a separate Approval.
2. Certificate of Approval AA01-105395A is revoked and replaced by this Certificate of Approval.
3. Any inquires concerning this Approval shall be directed to the Corner Brook office of the Pollution Prevention Division (telephone (709) 637-2482; facsimile (709) 637-2541).
4. In this Approval:
 - **Accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
 - **ACCGF** means Abitibi-Consolidated Company of Canada - Grand Falls Division, or its successor;
 - **Acutely lethal** means that the effluent at 100% concentration kills more than 50% of the rainbow trout subjected to it during a 96-hour period, when tested in accordance with the Rainbow Trout test;
 - **Air contaminant** means dust, fumes, mist, smoke, other particulate matter, vapour, gas, odorous substances or a combination of them in air which may impair the quality of the natural environment for any use that can be made of it, cause harm or discomfort to a person, adversely affect the health or impair the safety of a person or cause injury or damage to property or to plant or animal life;
 - **Batch** means oil from one tank with nothing added to the tank between withdrawals;
 - **Blanketed** means to cover a vessel with a lid that is specifically designed to contain vapours;
 - **BOD₅** means biochemical oxygen demand (5 day test);
 - **Certified** means the acceptance of the proficiency of the testing laboratory to perform analysis;
 - **Composite sample** means a quantity of undiluted effluent collected continually at an equal rate or at a rate proportionate to flow over a designated sampling period;

- **CSQG** means the *Canadian Soil Quality Guidelines*;
- **Daphnia Magna test** means a test conducted as per EPS reference method EPS 1/RM/14 Section 5 or 6;
- **Department** means the Department of Environment and Conservation and its successors;
- **Director** means the Director of the Pollution Prevention Division of the Department, and its successors;
- **Discharge criteria** means the maximum allowable limits as outlined in Table 3;
- **GD-PPD-009** means Procedural Guide for Determining the Frequency of Stack Emission Testing and Associated Plume Dispersion Modelling of Major Industrial Sources in the Province, or its successors;
- **GD-PPD-016** means Procedural Guide for Stack Emission Testing, or its successors;
- **GSC** means the Department of Government Services (Centre - Grand Falls-Windsor);
- **Grab sample** means a quantity of undiluted sample collected at any given time. In this approval it refers to used/waste oil and effluent;
- **Licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
- **Malfunction** means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions;
- **Minister** means the Minister of the Department of Environment and Conservation, or its successors;
- **PM_{2.5}** means particulate matter with a diameter less than 2.5µm;
- **Policy Directive PD:PP2001-01** means the policy directive regarding the use of accredited and certified laboratories by the Department and by organizations providing environmental data to the Department, or its successors;
- **Policy Directive PPD 98-01** means the policy directive defining the methods for the monitoring of air contaminants which have been approved by the Minister, or its successors;
- **Proficiency testing** means the use of inter-laboratory comparisons to determine the performance of individual laboratories for specific tests or measurements;
- **QA/QC** means Quality Assurance/Quality Control;

- **Rainbow Trout test** means a test conducted as per EPS reference method EPS 1/RM-13 Section 5 or 6;
- **Reference production rate** means the highest value of the 90th percentile of the daily production of finished product at the mill for any of the previous three years, the 90th percentile of the daily production of finished product at a mill for a year is a statistically derived value that is equal to the quantity of finished product, produced daily by the mill, that was exceeded on 10 percent of the days that the mill operated in the year;
- **Register(ed)**, in the context of source testing, means source testing results that have been submitted to and approved by the department in accordance with the *Stack Emission Testing Guidance Document* (GD-PPD-016);
- **Register(ed)**, in the context of storage tanks, means that information regarding the storage tank system has been submitted to a Government Service Centre office and a registration number has been assigned to the storage tank system;
- **Regulated substance** means a substance subject to discharge limit(s) under the Environmental Control Water and Sewage Regulations, 2003;
- **Spill or spillage** means a loss of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or of any volume of a regulated substance, onto or into soil or a body of water;
- **Storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **TPH** means total petroleum hydrocarbons as measured by the Atlantic PIRI method;
- **TSP** means total suspended particulate with diameters less than 100µm;
- **TSS** means total suspended solids;
- **Used lubricating oil** means lubricating oil that as a result of its use, storage or handling, is altered so that it is no longer suitable for its intended purpose but is suitable for refining or other permitted uses;
- **Used oil** means a used lubricating oil or waste oil; and
- **Waste oil** means an oil that as a result of contamination by any means or by its use, is altered so that it is no longer suitable for its intended purpose.

5. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the following:

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2004;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Ozone Depleting Substances Regulations, 2003;*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
- *Used Oil Control Regulations, 2002;*
- *Storage of PCB Waste Regulations, 2003;*
- *Accredited and Certified Laboratory Policy;*
- *Frequency of Stack Emission Testing Guidance Document;*
- *Stack Emission Testing Guidance Document;*
- *Ambient Air Monitoring Policy Directive, and*
- *Plume Dispersion Modelling Guidance Document;*

This Approval summarizes the pertinent requirements of the above listed acts, regulations, and Department policies. If it appears that the requirements of these acts, regulations or policies are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

6. All reasonable efforts shall be taken to minimize the impact of the operation on the environment. Such efforts include minimizing the area disturbed by the operation, reduction of air or water pollution, finding alternative uses, acceptable to the Department, for waste or rejected materials, and implementing programs of progressive reclamation of disturbed areas.
7. In accordance with Sections 93 and 94 of the *Environmental Protection Act*, ACCGF shall, on request, permit inspectors to carry out inspections authorized under the Act, of a place, other than a dwelling place, to which this Approval relates in order to determine compliance with the Act, applicable regulations and this Approval. The inspector may: inspect for compliance, adverse effects, releases, and remedial actions; take samples; test substances; and review records.
8. ACCGF shall keep all records or other documents required by this Approval at the operation location for a period of not less than three (3) years, beginning the day they were made. These records shall be made available for review by officials of the Department or the GSC when requested.
9. Should ACCGF wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Minister. ACCGF shall comply with the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made 60 days ahead of the noted date.

Waste Management

10. All waste generated at the facility is subject to compliance with the Part IV or V of the *Environmental Protection Act*. All non-industrial waste shall be placed in closed containers and, on at least a weekly basis, removed from the site. If required, industrial waste shall be disposed of by a licenced operator. These wastes shall be disposed of at an authorized waste disposal site with the permission of the owner/operator of the site.
11. ACCGF shall follow the Waste Management Plan for their pulp and paper mill operation, as submitted to the Department on *December 31, 2002*. Every year the Waste Management Plan shall be reviewed and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Director for review.

Noise

12. All efforts shall be made to minimize and control noise resulting from the pulp and paper mill operating activities. All vehicles hauling materials within the facility shall have exhaust and muffling devices in good working order.
13. ACCGF may be required to submit a Noise Management Plan should noise generation become an issue.

Chemical Operations

14. All chemical loading and blending shall be done inside the facility, with no chemical containers being opened outside. All chemicals shall be liquids with no dust generation. All vessels will be blanketed to eliminate vapour or odour releases. ACCGF shall obtain prior written approval from the Director before initiating any changes to present chemical operations.
15. Empty chemical packaging shall be either sent back to the original equipment manufacturer for re-use; to a recognized disposal company, or; to a recognized drum recycling facility. All waste material will be retained on-site for collection and disposal by a recognized waste treatment company according to provincial and federal regulations.

Spill Containment and Prevention

16. Areas in which chemicals are used or stored shall have impermeable floors and dykes or curbs and shall not have a floor drain system, nor shall they discharge to the environment. Areas inside the dykes or curbs shall have an effective secondary containment capacity of at least *110%* of the chemical storage tank capacity. These dyked areas shall be kept clear of material that may compromise the capacity of the dyke system. Once a year, the dykes shall be visually inspected for their liquid containing integrity, and repairs shall be made when required. Once every ten years, the dykes shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

17. All on site storage of petroleum shall comply with the *Storage and Handling of Gasoline and Associated Products Regulations, 2003*. All aboveground storage tanks shall be registered with a Government Service Centre and all such aboveground storage tanks shall be clearly and visibly labelled with their GAP registration numbers. The letters and numerals on the labels shall be at least 100 millimetres in height.
18. All equipment repair facilities shall have both an oil/water separator, or other similar collection device, and an impermeable floor constructed so that drainage is directed to the oil/water separator. All used oils shall be disposed as per the *Used Oil* section.
19. By **May 31, 2005**, ACCGF shall review and revise/complete the "Inventory of Oil and Chemical Storage Tanks (submitted to the Department on June 1, 2004). The revised/completed list shall include the following information: a plan showing location, registration number, identification number, material stored, capacity, tank material, tank type, year of manufacture, date of installation, date of last inspection, failure history, maintenance history, dyke capacity and date of next planned inspection.
20. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate API/ULC standards.

Contingency Plan

21. The contingency plan for the operation of ACCGF, as submitted to the Department on **February 4, 2004**, shall be followed. Copies of the plan shall be placed in convenient areas throughout the facility so that employees can easily refer to it when needed. ACCGF shall ensure that all employees are aware of the plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. Every year, as a minimum, the plan shall be reviewed and revised as necessary. All proposed revisions shall be submitted to the Director for review.
22. Every time ACCGF implements the contingency plan, information shall be recorded for future reference. This will assist in reviewing and updating the plan. The record shall consist of all incidents with environmental implications, and include such details as: date; time of day; type of incident (i.e. liquid spill, gas leak, granular chemical spill, equipment malfunction, etc.); actions taken; problems encountered; and other relevant information that would aid in later review of the plan performance. Each incident report shall be submitted to the Director as per the *Reporting* section.

Industrial Site Decommissioning and Restoration Plan

23. A plan to restore areas disturbed by the operation shall be submitted to the Director for review. ACCGF shall submit a yearly progress report, updating the progress of the working group developing the restoration plan (reference correspondence from the Mill of December 31, 2002). This progress report shall be submitted by **December 31 of each year**. For guidance on the preparation of the plan, refer to Appendix B. Wherever possible, the plan shall promote progressive restoration of disturbed areas.
24. In the event of facility closure, ACCGF shall prepare plans for complete site rehabilitation. The plans shall be submitted to the Director for review and approval at least one year before the planned closure date. The documentation shall include updated site plans as well as an engineering proposal for the site rehabilitation and closure.

Used Oil

25. ACCGF is permitted to accept and combust, in the Main Boiler (#4) and the Package Boiler (#1), Class 1 used oil only. Class 1 used oil is defined as any used oil in which the concentration of each contaminant listed in Column 1 of Table 1 is below or equal to the corresponding level in Column 2 of Table 1. All other used oil shall be disposed by a licensed used oil collector.

Table 1 - Used Oil	
COLUMN 1	COLUMN 2
Substance	Concentration (mg/kg)
Polychlorinated Biphenyls (PCB's)	5
Total Organic Halogens (as chlorine)	1000
Cadmium	2
Chromium	10
Lead	10

26. The maximum daily percentage of used oil that may be substituted for bunker C is 40%. By **May 31, 2005**, ACCGF shall have only one Bunker C Storage tank containing a mixture of used oil and Bunker C, indicate in writing which tank is "designated" for combined Bunker C and used oil storage, and have the ability to stop the supply of fuel from this tank in the event that problems develop as a result of used oil combustion.
27. Prior to combustion of on-site generated used oil, ACCGF shall obtain a certificate of analysis for each batch. Analysis shall be on a representative sample of the used oil stored. Each sample shall be analysed for the constituents listed in Column 1 of Table 1. All analysis results shall be submitted to the Director, as per the *Reporting* section.
28. Prior to accepting delivery of off-site generated used oil, ACCGF shall obtain a certificate of analysis for each batch of used oil delivered. Analysis shall be on a representative sample of the used oil to be received. Each batch of used oil delivered shall have been analysed for the constituents listed in Column 1 of Table 1 or the constituents listed in Table 2 (Used Oil). All analysis results shall be submitted to the Director, as per the *Reporting* section.
29. ACCGF shall maintain, and submit as per the *Reporting* section, a record of all used oil received. The record shall include:
- name of supplier;
 - date and volume of used oil unloaded;
 - the certificate of analysis for each batch of used oil delivery received; and
 - the laboratory where the analysis was performed.
30. ACCGF shall exercise due diligence in ensuring that their commercial sources are properly batching used oil such that analysis results remain representative for the used oil delivered.

31. ACCGF shall maintain, and submit as per the *Reporting* section, a record of used oil generated. The record shall include:
- date sampled;
 - date transferred from holding tank;
 - volume determined suitable for combustion and transferred from holding tank;
 - the certificate of analysis for each batch of used oil; and
 - the laboratory where the analysis was performed.
32. The maximum % used oil substituted for Bunker C, for combustion and storage, shall not increase until:
- two elaborate sets of used oil analysis results, constituents indicated in Table 2, have been submitted;
 - combustion at the current level has occurred for a minimum of 45 days;
 - an increase to the maximum % has been requested by ACCGF; and
 - written permission from the Director has been given.

Constituent	Unit	Bunker C	Used Oil
Gravity @ 60 °F	API	✓	✓
Density @ 15°C	kg/m ³	✓	✓
Flash Point	°C	✓	✓
Pour Point	°C	✓	✓
Sulphur	% by weight	✓	✓
BTU's	BTU/lb	✓	✓
Ash @ 775 °C	% by weight	✓	✓
Sediment	% by weight	✓	✓
Water	% by volume	✓	✓

34. In the event that problems develop, with respect to used oil analysis or combustion, the Director may give the proponent written notice prohibiting further combustion of used oil. ACCGF shall be capable of ceasing the combustion of used oil upon notification of the Director.
35. ACCGF shall notify, in writing, the GSC that used oil is being mixed with Bunker C. The notification shall include the tank identification # (eg. GAP #), tank location, and the anticipated maximum percentage used oil contents within the tank. A copy of the notification shall be submitted to the Director.

Fuel Assay and Consumption

36. ACCGF shall maintain, and submit to the Director on a monthly basis, as per the *Reporting* section, a record of the daily fuel consumption for each boiler. The record shall include:
 - a. volume of Bunker C combusted;
 - b. volume of used oil combusted,
 - c. percentage used oil substituted for Bunker C;
 - d. amount of bark, in tonnes, combusted; and
 - e. amount of sludge, in tonnes, combusted.

Bunker C

37. A certificate of analysis for Bunker C shall be obtained, by ACCGF, prior to accepting delivery, where possible. Each delivery of Bunker C shall be analysed for the constituents listed in column 3 of Table 2. Analysis shall be on a representative sample of the Bunker C received.
38. ACCGF shall maintain, and submit as per the *Reporting* section, a record of all Bunker C received. The record shall include:
 - a. name of the supplier;
 - b. date and amount of Bunker C unloaded;
 - c. the certificate of analysis for each Bunker C delivery received; and
 - d. the laboratory where the analysis was performed.

Boiler Ash

39. ACCGF shall, on a monthly basis, have the boiler ash tested (complete metals scan, including mercury) to verify that it does not contain hazardous constituents. A report including the results of analysis and quantity of boiler ash to be disposed, shall be submitted to the Director as per the *Reporting* section.
40. Where all contaminant concentrations are below, or equal to, the maximum allowable levels outlined in the *CSQG*, for commercial land use, the ash is not considered hazardous and may be disposed in an approved waste disposal site, provided the owner/operator is willing to accept such waste and the local GSC has agreed with the disposal of the ash at the site.

41. Where one or more contaminant concentrations were in excess of the maximum allowable levels outlined in the CSQG, for commercial land use, the ash must be further tested using the US Environmental Protection Agency Method 1311, the Toxicity Characteristic Leaching Procedure (TCLP), or other procedure as determined by the Director. Contaminants which shall be tested, using the TCLP, are those which were in excess of the maximum allowable levels outlined in the CSQG, for commercial land use. Results of analysis of the extractant shall be submitted to the Director as per the *Reporting* section.
42. Where all contaminant concentrations in the extractant are below the maximum allowable levels, as determined by the Director, the ash is not considered hazardous and may be disposed in an approved waste disposal site, provided the owner/operator is willing to accept such waste and the local GSC has agreed with the disposal of the ash at the site.
43. Where one or more contaminants in the extractant are above the maximum allowable levels, as determined by the Director, the ash is considered a hazardous waste and will not be approved for disposal in a waste disposal site in this Province. Transporters of hazardous waste shall have an approval issued by the Minister. Those generating hazardous waste shall have a waste generators number issued by the Director and shall also complete the required information outlined in the Waste Manifest Form.
44. The frequency of boiler ash testing may be reduced to quarterly if the monthly testing results demonstrate that the ash is not hazardous for twelve consecutive months. The Director may increase the frequency of boiler ash testing to each time boiler ash is disposed, if it is found that the boiler ash fails the leachate testing. Alternate ash disposal options shall require prior review and authorization by the Director.

Effluent Treatment System

45. Prior to discharge, effluent shall be treated through an activated sludge wastewater treatment process. The treatment process shall be in accordance with the terms and conditions provided in the system operating manual (Operating Manual Activated Sludge Wastewater Treatment - October 2004). Should modifications to the treatment system process be deemed necessary, ACCGF shall provide written notification to the Director before initiating.
46. Sludge produced from the effluent treatment process shall be dewatered and used as fuel for the Main Boiler (#4). ACCGF shall obtain prior written approval from the Director before initiating any alternate methods of sludge disposal.
47. ACCGF shall make every reasonable effort to ensure that odour resulting from the operation of the effluent treatment system is not offensive to other property owners. Should complaints be received regarding odours or should odour become an issue, ACCGF shall submit to the Director an action plan outlining the mitigative measures which shall be implemented.
48. Other than predefined chemicals and nutrients, the Director shall be notified, in writing, of the addition of any chemical, polymer or flocculant to the effluent treatment system within *30 days* of such an occurrence.

Effluent Monitoring and Discharge

49. ACCGF is only permitted to discharge mill effluent to the Exploits River via the North Sewer and the Activated Sludge Wastewater Treatment (ASWT) system outfall under the Terms and Conditions as outlined in this Approval. All piping transporting effluent shall be maintained so that there is no leakage, spillage, seepage or other release, except at the point where effluent is normally discharged.
50. ACCGF shall perform an Effluent Monitoring Program as per Table 3. All results from the Effluent Monitoring Program shall be submitted to the Director as per the **Reporting** section.

Table 3 - Effluent Monitoring Program			
Locations	Parameters	Frequency of Sampling	Discharge Criteria
1 North Sewer Monitoring Station	pH	continuous	5.5 to 9
	electrical conductivity	continuous	-
2 ASWT System Outfall Monitoring Station	flow	continuous	-
	TSS	24 hr composite daily	†
	BOD ₅	24 hr composite 3 times per week	†
	TPH	monthly grab	15 mg/l
	Rainbow Trout (96-hour LT ₅₀ or LC ₅₀)	monthly grab	†
	Daphnia magna test (48-hour LT ₅₀ or LC ₅₀)	weekly grab	†

† as per *Pulp and Paper Effluent Regulations*

51. If an effluent sample fails a Daphnia magna test, ACCGF shall immediately collect an effluent sample and perform a Rainbow Trout LC₅₀ test. If this Rainbow Trout test fails, ACCGF shall follow the testing and frequency outlined in the following section. In the event that a sample was collected for a LC₅₀ Rainbow Trout test in the same week as the Daphnia magna failure, an additional sample does not need to be collected. All results shall be submitted to the Director as per the **Reporting** section.
52. If an effluent sample fails a Rainbow Trout test, ACCGF shall collect an effluent sample one day each week and perform a LC₅₀ Rainbow Trout test until three consecutive tests are passed, after which the regular sampling frequency and testing may be resumed. All results shall be submitted to the Director as per the **Reporting** section.
53. If effluent discharged to Exploits River is determined to be acutely lethal for three consecutive Rainbow Trout tests, efforts must be made to identify the toxin and measures to prevent or reduce the toxin developed. The report(s), written as a result of these efforts, shall be submitted to the Director for review. After review of the report(s), the Director may place additional requirements upon the proponent for treatment of effluent prior to discharge.

54. ACCGF shall submit, no later than *January 31 of each year*, their reference production rate.
55. Oil Skimmers shall be maintained in good working order. All oil removed by the skimmers shall be disposed of in accordance with the *Used Oil* section of this Approval.

Quarterly Water Chemistry Analysis

56. ACCGF shall perform a Quarterly Water Chemistry Analysis Program starting *January, 2005*, as per Table 4. All results shall be submitted to the Director as per the *Reporting* section. The Quarterly Water Chemistry Analysis Program may be discontinued provided two (2) years have been submitted that indicate parameter levels within the acceptable limits.

Table 4 - Quarterly Water Chemistry Analysis Program					
Location	Parameters				
1. North Sewer	General Parameters - must include the following:				
2. ASWT System Outfall	nitrate + nitrite	colour	magnesium	reactive silica	TDS (calculated)
	nitrate	sodium	alkalinity	orthophosphate	phenolics
	nitrite	potassium	sulfate	phosphorous	carbonate (CaCO ₃)
3. Exploits River Upstream	ammonia	calcium	chloride	DOC	hardness (CaCO ₃)
	pH	sulphide	turbidity	conductance	bicarbonate (CaCO ₃)
	Metals Scan - must include the following:				
	aluminum	boron	lead	silver	vanadium
	antimony	cadmium	manganese	strontium	zinc
	arsenic	chromium	mercury	thallium	
	barium	cobalt	molybdenum	tin	
	beryllium	copper	nickel	titanium	
	bismuth	iron	selenium	uranium	

Ambient Air

57. ACCGF shall perform an Ambient Air Monitoring Program. The program shall consist of one (1) TSP monitor, one (1) PM_{2.5} monitor, one (1) SO₂ monitor, one (1) H₂S monitor, and a meteorological station. All results from the Ambient Air Monitoring Program shall be submitted to the Director as per the *Reporting* section. Frequency of sampling shall coincide with the National Air Pollution Surveillance (NAPS) schedule with the exception of SO₂ and H₂S, which shall be continuous.
58. Ambient air monitoring shall be done in accordance with Policy Directive PPD 98-01, or its successors. The monitoring program shall be as outlined in Table 5.
59. Automated Particulate monitors shall determine particulate by a method indicated in United States EPA 40 CFR 50, Appendix L, "Reference Method for the Determination of Fine Particulate Matter as PM_{2.5} in the Atmosphere," or alternate method approved by the Director. Installation and operation of these monitors shall comply with United States

EPA Quality Assurance Guidance Document 2.12 "Monitoring PM_{2.5} in Ambient Air Using Designated Reference or Class 1 Equivalent Methods." Automated monitors for PM_{2.5} and TSP shall be approved as United States EPA designated equivalent methods for PM₁₀ in ambient air, and must be acceptable to the Director.

Table 5 - Ambient Air Monitoring Program	
Site	Parameter
On Scott Avenue east of the mill	TSP, PM _{2.5} , SO ₂ , H ₂ S

60. SO₂ and H₂S shall be determined in accordance with the EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II - Section 2.9: "Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Fluorescence)", or alternate method as approved by the Director.
61. PM_{2.5} shall be determined in accordance with the EPA Quality Assurance Guidance Document 2.12 "Monitoring PM_{2.5} in Ambient Air Using Designated Reference or Class I Equivalent Methods", or alternate method as approved by the Director.

Pollution Control Equipment

62. ACCGF shall implement the activities listed in the Action Plan submitted on February 27, 2003 to reduce Particulate Emissions from # 4 Boiler. These activities shall be carried out in 2004/ 2005 to bring emissions into compliance with the Air Pollution Control Regulations by **July 31, 2005**. ACCGF shall submit quarterly progress reports updating the status of the Action Plan. A revised Plan shall be submitted to the Director by **July 31, 2008**, to proceed diligently beyond compliance.
63. All pollution control equipment shall be maintained and operated per the supplier's specifications for best performance.

Continuous Opacity Monitoring System

64. Opacity of emissions shall be continuously measured and recorded using a Continuous Opacity Monitoring System (COMS) that meets all the requirements of *Performance Specification 1 (PS-1) - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources*, of the United States *Code of Federal Regulations - 40 CFR Part 60, Appendix B*. Minimum QA/QC requirements are specified to assess the quality of COMS performance. Daily zero and span checks, quarterly performance audits, and annual zero alignment checks are required to assure the proper functioning of the COMS and the accuracy of the COMS data. These shall be recorded in a written log and a copy made available on request. Should ACCGF employ acceptable BACT, as defined in the Air Pollution Control Regulations, on any emission source, and further operates a COMS on that emission source, then upon application to the minister, ACCGF will be exempt from the provisions of this section for that particular emission source.

65. The United States EPA Federal Register *Test Method 203 - Determination of the Opacity of Emissions from Stationary Sources by Continuous Opacity Monitoring Systems* shall be used to determine compliance with the *Air Pollution Control Regulations*.
66. Monthly opacity data reports, for the Main Boiler (#4) and the Package Boiler (#1), shall be submitted to the Director in the form of six minute arithmetic averages of instantaneous readings as per the *Reporting* section. Each six minute average data point shall be identified by date, time and average percent opacity. The data shall be kept in digital format for a period of two years.

Stack Emissions Testing and Dispersion Modelling

67. Stack emissions testing shall be conducted on the Main Boiler (#4) Stack, and the Package Boiler (#1) Stack, in accordance with GD-PPD-016 and GD-PPD-009. Each boiler shall be tested under all fuel feed operating conditions; oil only and oil and hog fuel (where applicable), including an appropriate percentage of used oil.
68. A pretest plan shall be submitted to the Director for approval **60 days** in advance of any stack emissions testing. All testing shall be conducted only after acceptance of the pretest plan by the Director. ACCGF shall notify the Director of the final source testing schedule, **7 days** prior to the actual commencement of source testing.
69. Stack emissions testing samples shall be analysed for the parameters listed in Table 6 using the specified method. If deemed necessary by the Director, other air contaminants shall be included in the analysis. The Director reserves the right to require retesting if the pretest plan or specified methods are not followed.
70. Each day, during stack emissions testing, the facility shall sample and report the feed fuel of each stack being sampled that day, and have such sample analysed as per Table 7. As well, ACCGF shall submit the hog fuel feed rate, where applicable, during each day of stack emissions testing.
71. The stack emissions testing results, irrespective of any other requirements placed on the facility such as a dispersion model report, shall be submitted to the Department within **75 days** of completion of the sampling and shall include:
 - a. all field data recorded during testing;
 - b. instrument calibration information;
 - c. sampling site characteristics;
 - d. detailed statistics for each sample run;
 - e. fuel consumption and composition data for each sample run;
 - f. data confirming the required facility operating conditions
72. Plume dispersion modeling shall be performed using stack emission testing results for each of the contaminants recorded, under all operating conditions. Plume dispersion modeling results shall be submitted to the Department within **120 days** of completion of the stack emission testing.
73. ACCGF are required to complete a stack emission test and demonstrate their level of compliance with respect to the *Air Pollution Control Regulations*, via a registered dispersion model, by **July 31, 2005**. Thereafter, ACCGF shall be required to complete a stack emission test once every four years if it has been shown, via a registered dispersion

model, that the operation is in compliance with the *Air Pollution Control Regulations*. If it has been shown, via a registered dispersion model, that the operation is not in compliance with the *Air Pollution Control Regulations*, then the facility shall complete a stack emission test every two years.

Table 6 - Stack Emissions Testing Sampling Requirements	
Parameter	Test Method - US EPA
carbon monoxide	10
carbon dioxide	3A
nitrous oxides	7
sulphur dioxide	6C
oxygen	3A
particulate matter	5
particulate matter fractions	201A

Table 7 - Fuel Assay and Analysis Requirements	
Parameter	Method
fuel consumption	n/a
% sulphur by weight	ASTM D129-95 or ASTM D4294-98
% ash by weight	ASTM D482-95
API gravity	ASTM D4052-96
nickel (ppm)	AA or ICP
vanadium (ppm)	AA or ICP
cadinium (ppm)	AA or ICP
chromium (ppm)	AA or ICP
lead (ppm)	AA or ICP

74. Plume dispersion modeling shall be performed using stack emission testing results for each of the contaminants recorded, under all operating conditions. Plume dispersion modeling results shall be submitted to the Department within *120 days* of completion of the stack emission testing.
75. ACCGF are required to complete a stack emission test and demonstrate their level of compliance with respect to the *Air Pollution Control Regulations*, via a registered dispersion model, by *July 31, 2005*. Thereafter, ACCGF shall be required to complete a stack emission test once every four years if it has been shown, via a registered dispersion model, that the operation is in compliance with the *Air Pollution Control Regulations*.

If it has been shown, via a registered dispersion model, that the operation is not in compliance with the *Air Pollution Control Regulations*, then the facility shall complete a stack emission test every two years.

Chicco's Landing

76. ACCGF shall perform a monitoring program at the Chicco's Landing Site as per Table 8.
77. ACCGF shall obtain a monthly sample from the discharge pipe and monitoring well located at Chicco's Landing, and have the sample tested for pH, turbidity and specific conductance. Results shall be submitted to the Director as per the *Reporting* section.
78. ACCGF shall obtain a sample from Stoney Brook and standing surface water at Chicco's Landing, and have the sample tested for pH. Results shall be submitted to the Director as per the *Reporting* section.

Table 8 - Chicco's Landing Monitoring Program Requirements		
Location	Parameters	Frequency
Discharge Pipe	pH Turbidity Specific Conductivity	monthly † grab sample
Monitoring Well	pH Turbidity Specific Conductivity	monthly † grab sample
Stoney Brook	pH	monthly grab sample
Standing Surface Water	pH	monthly grab sample

† sample only needs to be taken when there is an outflow from the discharge pipe

Analysis and QA/QC

79. Unless otherwise stated herein, all water and/or oil analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an in-house laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which ACCGF shall be billed for each laboratory inspection in accordance with Schedule 1 of the *Accredited and Certified Laboratory Policy*. Recommendations of the Director stemming from the annual inspections shall be addressed **within 6 months**, otherwise the analytical results shall not be accepted by the Director.
80. If ACCGF wish to perform in-house laboratory testing and submit to an annual inspection by the Department then proficiency testing recognition shall be obtained for compliance parameters for which this recognition exists. The compliance parameters are listed in the *Used Oil, Fuel Assay and Consumption, Effluent Monitoring and Discharge, Boiler*

Ash, Quarterly Water Chemistry Analysis, Stack Emissions Testing and Dispersion Modelling and Chicco's Landing sections. If using a commercial laboratory, ACCGF shall contact that commercial laboratory to determine the sampling and transportation QA/QC requirements for those activities.

Monitoring Alteration

81. The Director has the authority to alter monitoring programs or require additional testing at any time when:
- pollutants might be released to the surrounding environment without being detected;
 - an adverse environmental effect may occur; or
 - it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters at a particular sampling station.
82. ACCGF may, at any time, request that monitoring programs or requirements of this Approval be altered by:
- requesting the change in writing to the Director; and
 - providing sufficient justification, as determined by the Director.

The requirements of this Approval shall remain in effect until altered, in writing, by the Director.

Reporting

83. Monthly reports summarizing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Department in hardcopy and digital formats within *30 calendar days* of the reporting month. The hardcopy and a digital copy by E-mail (statenv@mail.gov.nf.ca), or on a diskette, shall be sent to the Director.
84. All incidents of:
- *Contingency Plan* implementation; or
 - non-conformance of any condition within this approval; or
 - spillage or leakage of a regulated substance; or
 - whenever discharge criteria is, or is suspected to be, exceeded; or
 - verbal/written complaints of an environmental nature from the public received by the company related to this project;

shall be immediately reported, within one working day, to a person or message manager or facsimile as follows:

• contacting the Department (Corner Brook office) by phone (709) 637-2482 or fax (709) 637-2541; or

contacting the Department (St. John's office) by phone (709) 729-2555 or fax (709) 729-6969.

A written report including a detailed description of the incident, summary of contributing factors, and an action plan to prevent future incidents of a similar nature, shall be submitted to the Director. The action plan shall include a description of actions already taken and future actions to be implemented, and shall be submitted within two weeks from the date of the initial incident.

85. Any spillage or leakage of gasoline or associated product shall be reported immediately through the Canadian Coast Guard at (709) 772-2083.

Liaison Committee

86. The Department recognizes the benefits, and at times the necessity, of accurate, unbiased communication between the public and industrial operations which have an impact on the properties and residents in the area. The Department encourages the formation and regular meeting of a Liaison Committee comprised of representatives of ACCGF, the Department and independent members of the general population of Grand Falls - Windsor. Regular meetings of the Liaison Committee will provide a clear conduit of communication between concerned citizens and ACCGF. The Director reserves the right to require the formation of a Liaison Committee should it be deemed necessary.

Expiration

87. This Certificate of Approval expires *October 15, 2006*.
88. Should ACCGF wish to continue to operate beyond this expiry date, a written request shall be submitted to the Director for the renewal of this approval. Such request shall be made *6 MONTHS PRIOR TO EXPIRATION DATE*.

APPENDIX B

Industrial Site Decommissioning and Restoration Plan Guidelines

As part of the Department of Environment's ongoing commitment to minimize the residual impact of industrial activities on the environment of the province, the Department requires that Abitibi Consolidated Company of Canada - Grand Falls Division develop a decommissioning and restoration plan for the pulp and paper mill facility in Grand Falls and its associated property. These guidelines are intended to provide some general guidance as to the expectations of the Department with regard to the development of a decommissioning and restoration plan, and to identify areas that are of particular concern or interest. The points presented are for consideration, and are open to interpretation and discussion.

Decommissioning and restoration plans are intended to present the scope of activities that a company shall undertake at the time of final closure and/or decommissioning of the industrial properties. Where it is useful and practical to do so the company is encouraged to begin undertaking some of the activities outlined in the plan prior to final closure and decommissioning. The objectives of the restoration work to be undertaken can be summarized as follows:

- to ensure that abandoned industrial facilities do not endanger public health or safety;
- to prevent progressive degradation and to enhance the natural recovery of areas affected by industrial activities;
- to ensure that industrial facilities and associated wastes are abandoned in a manner that will minimize the requirement for long term maintenance and monitoring;
- to mitigate, and if possible prevent, the continued loadings of contaminants and wastes to the environment. The primary objective shall be to prevent the release of contaminants into the environment. Where prevention is not practical due to technical or economic limitations then activities intended to mitigate the consequence of such a release of contaminants shall become the objective of restoration work;
- to return affected areas to a state compatible with the original undisturbed condition, giving due consideration to practical factors including economics, aesthetics, future productivity and future use; and
- to plan new facilities so as to facilitate eventual rehabilitation.

The decommissioning and restoration plan should:

- identify areas of known historical or current contamination;
- identify past or existing operational procedures and waste management practices that have, or may have, resulted in site contamination;
- highlight the issues or components to be addressed;
- identify operational procedures and waste management practices that can prevent or reduce site contamination;
- consider future land use, regulatory concerns and public concerns;

enable estimation of the resources and time frame required to decommission the facility and restore the site to a condition acceptable to the Department;

- enable financial planning to ensure the necessary funds for decommissioning and restoration are set aside during the operational life of the facility; and
- include arrangements for appropriate project management to ensure successful completion of the decommissioning and restoration project.

cc: Hon. Anna Thistle, MHA
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