



Ministry
of the
Environment

Ministère
de
l'Environnement

AMENDED CERTIFICATE OF APPROVAL
AIR
NUMBER 0735-4LKNCQ

Tembec Industries Inc.
Pulp Group, Smooth Rock Falls Division
P.O. Box 310
Mill Road
Smooth Rock Falls, Ontario
P0L 2B0

Site Location: Lot 21, Concession IX
Smooth Rock Falls Town, District Of Cochrane

You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:

-one (1) natural gas fired thermal incinerator used to control the emissions from the following sources:

SOURCE	EXHAUST GAS FLOW RATE FROM THE SOURCE TO THE INCINERATOR (kilogram per hour)	TEMPERATURE (degrees Celsius)
Stripper Overhead Gases (SOG) from #1 Steam Stripping Column	250	80
Stripper Overhead Gases (SOG) from #2 Steam Stripping Column	227	80
Concentrated Non-Condensable Gases (CNCG) from #1 and #2 Evaporator trains including: #1 evaporator seal tank, #2 evaporator vacuum pump, digester flash steam condenser and stripper surge tank	447	80
Digester flash gases (diverted from Teller scrubber)	629	93
TOTAL	1553	--

The thermal incinerator is equipped with a natural gas fired burner, having a maximum heat input of 6,324,000 kilojoules per hour, and a combustion chamber volume of 15 cubic metres. Exhaust gases from the incinerator are directed into one (1) quench vessel prior to exhausting into one (1) spray type scrubber equipped with a mist eliminator, having a design pressure drop of 0.1 kilopascal, utilizing recirculated water and a pH adjuster (oxidized white liquor or sodium hydroxide) as scrubbing solution with a total liquid flow rate ranging from 8 to 16 litres per second, having a tower diameter of 1.68 metres and a tower height of 6.1 metres, prior to exhausting into the atmosphere at a maximum volumetric flow rate of 4.0 actual cubic metres per second, through a stack having an exit diameter of 0.61 metre and extending 18.3 metres above roof and 29.3 metres above grade.

All in accordance with the applications for a Certificate of Approval (Air) submitted by Malette Kraft Pulp & Power Division, a Division of Tembec Inc., signed by G. Houze, dated November 17, 1998, and Phil Lum, dated March 31, 2000 and all supporting information.

CONTENT COPY OF ORIGINAL

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

- (1) "Act" means the *Environmental Protection Act*;
- (2) "Continuous Monitoring System" means the continuous temperature monitoring and recording system, as described in the Company's application, this Certificate, including Schedule "A", and in the supporting documentation referred to herein, to the extent approved by this Certificate;
- (3) "Certificate" means this Certificate of Approval, including Schedule "A", issued in accordance with Section 9 of the Act;
- (4) "Company" means Tembec Industries Inc.;
- (5) "Director" means any Ministry employee appointed by the Minister pursuant to Section 5 of the Act;
- (6) "District Manager" means the District Manager, Timmins District Office, Northern Region of the Ministry;
- (7) "Equipment" means natural gas fired thermal incinerator, described in the Company's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate;
- (8) "Facility" means the entire operation located on the property where the Equipment is located;
- (9) "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
- (10) "Ministry" means the Ontario Ministry of the Environment;
- (11) "Point of Impingement" means any point in the natural environment. The point of impingement for the purposes of verifying compliance with the Act shall be chosen as the point located outside the Company's property boundaries at which the highest concentration is expected to occur, when that concentration is calculated in accordance with the Appendix to Regulation 346 written under the Act, or any other method accepted by the Director;
- (12) "Scrubber" means spray type scrubber equipped with a mist eliminator described in the Company's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

PERFORMANCE

1. The Company shall ensure that the Facility complies with the following performance requirement by January 1, 2001:

(1) the maximum half-hour average concentration of total reduced sulphur (expressed as hydrogen sulphide) at a point of impingement from the sources of contaminant shall not be greater than 40 micrograms per cubic metre.

2. The Company shall ensure that the Equipment is designed and operated to comply, at all times, with the following performance requirement:

(1) the residence time of the combustion gases in the combustion chamber shall be not less than one second at a temperature of not less than 871 degrees Celsius.

OPERATION AND MAINTENANCE

3. The Company shall operate the Equipment in such a manner that:

- (1) the burner flame in the combustion chamber is established prior to the introduction of the process exhaust gases into the Equipment;
- (2) the temperature in the combustion chamber, as measured by the thermocouple, is maintained at a minimum of 871 degrees Celsius at all times; and
- (3) no chlorinated and/or fluorinated compounds, including polyvinyl chloride and teflon, are introduced into the Equipment.

4. The Company shall ensure that the Equipment, the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program are operated and maintained at all times. The Company shall:

- (1) prepare, before the commencement of operation of the Equipment and update, as necessary, a manual outlining the operating procedures and a maintenance program for the Equipment, the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program including:
 - (a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment, Continuous Monitoring System, Scrubber supplier and the equipment used in the ambient air quality monitoring program;
 - (b) emergency procedures;
 - (c) procedures for recording and responding to environmental complaints relating to the operation of the Facility;
 - (d) frequency of cleaning of the Scrubber;
 - (e) a list of personnel responsible for the operation and maintenance of the Equipment, the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program;
 - (f) procedures for any record keeping activities relating to operation and maintenance of the Equipment, the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program; and
 - (g) implement the recommendations of the Manual.

MONITORING

5. The Company shall monitor the emissions and operation of the Equipment as follows:

CONTINUOUS MONITORING

- (1) The Company shall, prior to the commencement of the operation of the Equipment, install and subsequently conduct and maintain a program to continuously monitor the temperature at the location in the combustion chamber of the Equipment where the minimum retention time of at least one second for the combustion gases at a minimum temperature of 871 degrees Celsius is achieved.

The Continuous Monitoring System shall be equipped with a continuous recording device acceptable to the District Manager and shall comply with the requirements outlined in the attached Schedule "A".

AMBIENT AIR MONITORING

- (2) The Company shall carry out and maintain an ambient air quality monitoring program in location(s) agreed to by the District Manager for total reduced sulphur (as hydrogen sulphide), using methods and equipment

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acceptable to the District Manager.

The Company shall prepare and submit a summary of the ambient air quality monitoring data once a month or at a lesser frequency acceptable to the District Manager in a format acceptable to the District Manager.

RECORD RETENTION

6. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the monitoring and recording activities required by this Certificate. These records shall be made available to staff of the Ministry upon request. The Company shall retain :

- (1) all records on the maintenance, repair and inspection of the Equipment, the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program;
- (2) all records produced by the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program;
- (3) all records on the environmental complaints, including:
 - i. a description, time and date of the incident;
 - ii. wind direction at the time of the incident; and
 - iii. a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future; and
- (4) a description of any upset conditions associated with the operation of the Equipment and the Scrubber and remedial actions taken.

REPORTING

7. The Company shall notify the District Manager, in writing, of each complaint and the measures taken to address the cause of the complaint within two (2) business days of the complaint.

8. The Company shall notify the District Manager, orally, as soon as reasonably possible, and in writing as soon as reasonably possible, of each incident where the maximum one hour average concentration of total reduced sulphur (expressed as hydrogen sulphide) at the ambient air quality monitoring program location(s) agreed to by the District Manager, is greater than 40 micrograms per cubic metre. The notification shall include a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future.

This Schedule "A" forms part of the Certificate.

CONTINUOUS TEMPERATURE MONITOR AND DATA RECORDER

LOCATION:

The sample point for the Continuous Temperature Monitor shall be located at the point in the combustion chamber temperature representing a combustion gas residence time of 1 second.

PERFORMANCE:

The Continuous Temperature Monitor shall meet the following minimum performance specifications for the following parameters.

PARAMETERS SPECIFICATION

1. Type: shielded "K" type thermocouple, or equivalent.
2. Accuracy: ± 1.5 percent of the minimum gas temperature

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor without a significant loss of accuracy and with a time resolution of 1 minutes or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition Nos. 1 and 2 are included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Equipment.
2. Condition Nos. 3 and 4 are included on the Certificate to emphasize that the Equipment, the Continuous Monitoring System, the Scrubber and the equipment used in the ambient air quality monitoring program must be maintained and operated according to a procedure that will result in compliance with the Act, the regulations and this Certificate.
3. Condition Nos. 5(1) and 5(2) are included to require the Company to gather accurate information on a continuous basis so that compliance with Performance Requirements of this Certificate can be verified.
4. Condition No. 6 is included to require the Company to retain records and provide information to the Ministry so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can be verified.
5. Condition Nos. 7 and 8 are included to require the Company to report to the Ministry so that compliance with the Act, the regulations and this Certificate can be verified.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 8-6176-98-990 issued on August 10, 1999.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written Notice served upon me, the Environmental Appeal Board and in accordance with Section 47 of the Environmental Bill of Rights, S.O. 1993, Chapter 28, the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Board. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

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And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Appeal Board
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Environmental Commissioner
1075 Bay Street, 6th Floor
Suite 605
Toronto, Ontario
M5S 2B1

AND

The Director
Section 9, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Appeal Board's requirements for an appeal can be obtained directly from the Board at:
Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

This instrument is subject to Section 38 of the Environmental Bill of Rights, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.ene.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted works are approved under Section 9 of the Environmental Protection Act.

DATED AT TORONTO this 27th day of June, 2000

Steve Klose, P.Eng.
Director
Section 9, *Environmental Protection Act*

ST/
c: District Manager, MOE Timmins
Phil Lum, Tembec Industries Inc.