

Boralex Ashland, Inc.)	DEPARTMENTAL
Aroostook County)	FINDINGS OF FACT AND ORDER
Ashland, Maine)	PART 70 AIR EMISSION LICENSE
A-577-70-A-I)	

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Boralex Ashland, Inc. (Boralex Ashland)
LICENSE NUMBER	A-577-70-A-I
LICENSE TYPE	Initial Part 70 License
NAIC CODES	4911 – Electrical Generation
NATURE OF BUSINESS	Electric Generating Station
FACILITY LOCATION	RR1, Box 125, American Realty Road, Ashland
DATE OF LICENSE ISSUANCE	July 2, 2002
LICENSE EXPIRATION DATE	July 2, 2007

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
Boiler #1	585.9 MMBtu/hr	Wood boiler
Boiler #1 Oil-Fired Burner	106.7 MMBtu/hr	#2 fuel oil, 0.5% sulfur
Diesel Generator #2	3.7 MMBtu/hr	Generator
Diesel Fire Pump #1	1.4 MMBtu/hr	Fire Pump

Boralex Ashland has additional activities not listed in the emission equipment table above, that are insignificant, but may be found in the application submitted on October 15, 1999.

C. Application Classification

The application for Boralex Ashland does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Process Overview

Boralex Ashland is a wood-fired electric generating facility in Ashland, Maine. Wood fuel is fed from a fuel chute into six pneumatic fuel distributors where it is blown across a specially designed trajectory plate and into the furnace portion of the boiler. Fuel is distributed on the traveling grate (both front to rear and laterally) via high pressure transport air settings and the trajectory plate angle setting. Heavier particles are spread evenly on the back of the travelling grate surface while fine particles are rapidly burned in suspension. Undergrate air is evenly distributed through the active grate area to aid the combustion process. Two levels of high pressure overfire air jets provide turbulence and thorough mixing of fuel and air to complete the combustion process.

As a result of a 1996 Consent Agreement, Boralex Ashland installed a 106.7 MMBtu/hr #2 fuel oil-fired auxiliary burner to stabilize combustion during periods of instability which lead to higher CO emissions. The auxiliary burner will operate on an “as-needed” basis and will promote flame stabilization in the boiler counteracting the effects of the severe cold and moisture.

The boiler is constructed of water-cooled walls with one refractory wall adjacent to the stoker. The boiler is sized and constructed to provide the time, temperature, and turbulence necessary to provide good combustion of wood fuel. The boiler combustion control system automatically controls the fuel feeder speed and the undergrate and overfire air flow.

B. Boiler #1

Boiler #1 is a Zurn boiler, manufactured and installed in 1992 with a maximum firing rate of 533.6 MMBtu/hr firing wood fuel with a 106.7 MMBtu/hr #2 fuel oil burner and is therefore subject to the provisions of New Source Performance Standards (NSPS) requirements 40 CFR Part 60, Subparts A and Db. Boiler #1 steam production rate is 367,400 #/hr based on a feed rate of 65.1 tons/hour at 4500 Btu per pound of wood fuel.

Boralex Ashland burns Reprocessed Wood Fuel (RWF) and Construction/Demolition Wood Debris (CDWD) in Boiler #1 in addition to conventional wood fuel:

- Up to ten (10%) percent by weight of the annual fuel use and daily feed rate may be RWF, which for the purpose of this license shall consist of chipped utility poles, railroad ties and other similar chemically treated wood products.
- Up to thirty (30%) percent by weight of the annual fuel use and daily feed rate may be CDWD, which for the purpose of this license shall be chipped wood demolition debris (including pallets) from which painted, chemically treated, and wood mixed with roofing and other non wood related demolition products have been removed such that the amount remaining is determined to be insignificant.

The operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP) controls particulate emissions from Boiler #1. Boralex Ashland operates one bank of three of ESP fields.

Boralex Ashland also utilizes Selective Non-Catalytic Reduction (SNCR) with urea injection to reduce NO_x emissions from Boiler #1.

A continuous emissions monitoring system (CEMS) is used at Boralex Ashland to demonstrate compliance with NO_x emission rates. A continuous opacity monitor (COM) is used to demonstrate opacity requirements. An oxygen (O₂) CEM is used to measure diluent oxygen in Boiler #1 emissions.

Streamlining

1. 40 CFR Part 60.43b(c)(1), (f), (g) and MEDEP Chapter 103 regulate particulate matter (PM) emission limits. However, Best Practical Treatment (BPT) is more stringent.
2. Chapter 101 is applicable for visible emissions. However, 40 CFR Part 60.43b(f) is more stringent.
3. 40 CFR Part 60 and Chapter 106 are applicable for fuel sulfur content. However, BPT fuel sulfur limit is more stringent.
4. 40 CFR Part 60 and Chapter 117 require the use of Continuous Opacity Monitors (COM). However, Chapter 117 is at least as stringent at 40 CFR Part 60.
5. 40 CFR Part 60.13 and Chapter 117 detail the sampling frequency of the CEM and COM. However, Chapter 117 is at least as stringent at 40 CFR Part 60.

6. 40 CFR 60.11(d) has been streamlined into Condition #7.
7. 40 CFR 60.11 (g) has been streamlined into Condition #14.

Periodic Monitoring

Stack testing for particulate matter emission rates shall be performed once every two years.

Periodic monitoring for particulate matter emissions shall be ESP primary and secondary voltages and currents on each field, taken once per shift:

Fuel oil record keeping which include records of hours of operation and fuel use through purchase receipts indicating the amount (gallons) and percent sulfur by weight.

Documentation that all CEMs are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51 Appendix P, and 40 CFR Part 60 Appendices B and F.

VOC monitoring will consist of a stack test to determine primary compliance. Demonstrated NO_x and opacity limits through CEM/COM data provides reasonable assurance the VOC emissions are being met.

C. Diesel Generator

The diesel generator has a maximum design heat input capacity of 3.7 MMBtu/hr firing diesel fuel with a maximum sulfur content of 0.05% by weight. This unit is not subject to NSPS requirements.

Streamlining

1. Chapter 106 regulates fuel sulfur content, however the BPT sulfur limit is more stringent.
2. Chapter 101 is applicable for visible emissions, however the BPT opacity limit is more stringent.

Periodic Monitoring

Fuel oil record keeping which include records of hours of operation and fuel use through purchase receipts indicating the amount (gallons) and percent sulfur by weight.

Based on the type and amount of fuel for which the diesel was designed, a properly maintained and operated diesel unit should not exceed opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emissions testing in accordance with 40 CFR Part 60, Appendix A, Method 9 is not required. However, neither the EPA nor the DEP is precluded from performing its own testing and may take enforcement action for any violations discovered.

D. Miscellaneous Emissions Unit

The miscellaneous emission unit is a 1.4 MMBtu/hr diesel fire pump.

Streamlining

1. Chapter 106 regulates fuel sulfur content, however the BPT sulfur limit is more stringent.
2. Chapter 101 is applicable for visible emissions, however the BPT opacity limit is more stringent.

Periodic Monitoring

Periodic monitoring shall consist of record keeping which includes records of fuel use through purchase receipts indicating amount (gallons) and percent sulfur by weight (documented through supplier fuel receipts) for the diesel fire pump.

Based on the type and amount of fuel for which the diesel was designed, a properly maintained and operated diesel unit should not exceed opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emissions testing in accordance with 40 CFR Part 60, Appendix A, Method 9 is not required. However, neither the EPA nor the DEP is precluded from performing its own testing and may take enforcement action for any violations discovered.

E. General Process Sources

General process particulate matter sources at Boralex Ashland include wood chip conveyors, transfer points and a portable wood chipper, which may or may not be on site. Any conveyor totally within a building shall be considered enclosed.

Periodic Monitoring

Based on best management practices, general process emission sources should not exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emissions is not required. However, neither the EPA nor the DEP is

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precluded from performing its own testing and may take enforcement action for any violations discovered.

F. Fugitive Emissions

Fugitive particulate matter sources at Boralex Ashland includes material stockpiles and roadways.

Periodic Monitoring

Based on best management practices, fugitive emission sources should not exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emissions is not required. However, neither the EPA nor the DEP is precluded from performing its own testing and may take enforcement action for any violations discovered.

G. Facility Emissions

The following total licensed annual emissions for the facility are based on the following raw materials used. All usages are based on a 12 month rolling total.

- Boiler #1 wood use of 570,276 tons per year (4,500 Btu/lb, 50% moisture).
- Boiler #1 fuel oil use of 1,000,000 gallons per year of #2 fuel oil (0.5% sulfur by weight) in the oil-fired auxiliary burner.
- 5,000 gallons per year of waste oil in Boiler #1.
- Diesel Generator fuel use of 13,500 gallons per year of diesel fuel (0.05% sulfur by weight).
- Diesel Fire pump fuel use of 5,110 gallons per year of diesel fuel (0.05% sulfur by weight).

Total Annual Emissions for the Facility
(used to calculate the annual license fee)

Pollutant	TPY
PM	53.0
PM ₁₀	53.0
SO ₂	95.5
NO _x	401.1
CO	773.6
VOC	41.6
NH ₃	21.9
Lead	0.27

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III. AIR QUALITY ANALYSIS

There have been no modifications to the facility, therefore the existing analysis performed for Boralex Ashland's 1997 Air Emission License A-577-72-D-A/R, which demonstrated compliance with MAAQS and increments, is sufficient for this initial Part 70 license.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-577-70-A-I, subject to the following conditions:

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to Boralex Ashland pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State only.**

Standard Statements

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;

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- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
 - (a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
 - (b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

(7) Permit Shield for Non-Applicable Requirements

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in the application dated October 15, 1999.

SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Boiler #1	40 CFR Part 60.44b(c)	There is no NSPS NO _x limit if the affected facility has an annual capacity factor less than 10% for oil firing in combination with firing wood.	Boiler #1 has an annual capacity factor less than 10% for firing oil.
Diesel Fire Pump	Chapter 103, Section 2(B)(4)(c)	Particulate emission limit for fuel burning equipment > 3.0 MMBtu/hr.	Not applicable, unit is < 3.0 MMBtu/hr.

(8) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

- (a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;
- (b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
- (c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
- (d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

- (9) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

Standard Conditions

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Ref. Title 38 MRSA §347-C);

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;

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- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;

- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.

- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 - (i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 - (ii) to demonstrate compliance with the applicable emission standards; or
 - (iii) pursuant to any other requirement of this license to perform stack testing.
 - (b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (c) submit a written report to the Department within thirty (30) days from date of test completion.
- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- (a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

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(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

(a) The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

(b) The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRS § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

(c) All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - (e) Such other facts as the Department may require to determine the compliance status of the source;

Special Conditions

(14) Boiler #1

A. Boiler #1 Parameter Monitor

Steam production shall be limited to 367,400 #/hr. Boralex Ashland shall monitor and record steam flow rate continuously for Boiler #1.

Note: “continuously” is defined as two data points taken over a one hour period.

The parameter monitor must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

[MEDEP Chapter 140, BPT]

B. A 106.7 MMBtu/hr auxiliary oil-fired burner shall remain installed in the existing Boiler #1. The auxiliary boiler shall fire #2 fuel oil with a fuel sulfur content not to exceed 0.5% by weight. Boralex Ashland shall not fire more than 1,000,000 gallons of oil (#2 fuel and waste oil combined) in the auxiliary burner based on a 12 month rolling total (<10% capacity factor. Reference 40 CFR Parts 60.42b(d) and 60.44b(c)).

[MEDEP Chapter 140, BPT]

C. Emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.02	MEDEP Chapter 140, BPT
PM ₁₀	0.02	MEDEP Chapter 140, BPT
NO _x	0.15	MEDEP Chapter 140, BPT

NO_x: The 0.15 lb/MMBtu limit is based on a 24 hour daily block average, via CEM. A 24 hour block average basis shall be defined as midnight to midnight. Boralex Ashland shall maintain the NO_x CEM in accordance with Chapter 117. The CEM shall meet the monitoring requirements of 40 CFR Part 60.13 as well as 40 CFR Part 60, Appendices B and F.
[MEDEP Chapter 140, BPT]

D. Lb/hr emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/hour
PM	11.7
PM ₁₀	11.7
SO ₂	54.1
NO _x	87.9
CO	175.8
VOC	9.4
NH ₃	5.0
Lead	0.062

PM, PM₁₀, SO₂, VOC, Lead and NH₃: Lb/hr limits are on a one (1) hour average and shall be demonstrated upon request by a stack test in accordance with this license.

NO_x lb/hr and CO lb/hr limits are based on a 24 hour block average basis and shall be demonstrated upon request by a stack test in accordance with this license. A 24 hour block average basis shall be defined as midnight to midnight.

[MEDEP Chapter 140, BPT]

E. Boiler #1 shall be equipped with an oxygen (O₂) CEM that meets the criteria of 40 CFR Part 60, Appendix B, Performance Specification 3.

[MEDEP Chapter 117]

- F. Boiler #1 shall be equipped with a computer combustion control system which shall automatically control the wood fuel flow rate, the underfire air flow rate, and overfire air flow rate.
[MEDEP Chapter 140, BPT]
- G. Emissions from Boiler #1 shall vent to Stack 1 which shall be at least 220 feet AGL and represent greater than 78.3% of the formula GEP stack height.
[MEDEP Chapter 140, BPT]
- H. Particulate matter (PM, PM₁₀) emissions from Boiler #1 shall be controlled by the operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP).

Boralex Ashland shall operate, at a minimum, the number of ESP fields that operated during the most recent demonstration of compliance with its licensed particulate emission limits. Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Air Emission Compliance Test Protocol, Boralex Ashland may perform additional particulate emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall Boralex Ashland be relieved of its obligation to meet its licensed emission limits.

Data for the following points in the ESP shall be recorded once per shift during operation:

- 1) Primary and secondary voltages on each field
 - 2) Primary and secondary current on each field
- [MEDEP Chapter 140, BPT]

- I. Boralex Ashland shall operate SNCR with urea injection equipped with a urea mixture flow rate monitor (periodic monitor) and data shall be recorded once per shift during operation.
[MEDEP Chapter 140, BPT]
- J. Boralex Ashland shall operate Boiler #1 such that the opacity does not exceed 20% over a six minute average except for one six minute period per hour of not more than 27%, subject to the provisions of Title 38 MRSA §349.
[MEDEP Chapter 140, BPT]
- K. Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system (COM). The COM shall be installed and certified in the stack. Boralex Ashland shall maintain the COM in accordance with Chapter 117.
[MEDEP Chapter 140, BPT]

L. Boralex Ashland shall conduct particulate emission and Ammonia (NH₃) slip testing, and demonstrate compliance, at least once every two years on Boiler #1. Ammonia (NH₃) slip shall not exceed 40 ppm_{dv} on a dry basis on a one (1) hour average (corrected to 12% CO₂). The initial test to be conducted by December 31, 2002.

[MEDEP Chapter 140, BPT]

M. Boiler #1 is subject to 40 CFR Part 60 Subparts A and Db and Boralex Ashland shall comply with the notification and record keeping requirements of 40 CFR Part 60.7.

40 CFR Part 60 Subpart Db requires maintaining records of the amount of each fuel combusted each day and calculation of annual capacity factor for each calendar quarter. Boralex Ashland shall maintain monthly fuel use records and determine an annual capacity factor on a 12 month rolling average basis with the new annual capacity calculated at the end of each calendar month and submitted annually.

Boralex Ashland shall also maintain records of fuel oil percent sulfur by weight through purchase receipts.

[MEDEP Chapter 140, BPT]

N. Boralex Ashland shall limit the annual fuel usage and daily feed rate (based on purchase records which quantify the type and quantity of RWF and CDWD) into Boiler #1 to:

- 1) Up to ten (10%) percent by weight of the annual fuel use may be RWF, which for the purpose of this license shall consist of chipped utility poles, railroad ties and other similar chemically treated wood products.
- 2) Up to thirty (30%) percent by weight of the annual fuel use may be CDWD, which for the purpose of this license shall be chipped wood demolition debris from which painted or chemically treated, and wood mixed with roofing and other non wood related demolition products have been removed such that the amount remaining is determined to be insignificant.

O. Boralex Ashland shall notify the regional Air Bureau inspector and Air Bureau Licensing section of any fuel pile fires by the next business day.

P. Boralex Ashland shall obtain a Department solid waste license approving the storage and incineration of CDWD prior to firing CDWD in Boiler #1.

Q. Boralex Ashland may burn no more than 5,000 gallons per year of waste oil (generated on site only) in Boiler #1. The annual limit shall be met over a 12-month rolling total.

Only waste oil meeting the criteria “specification” or “off-specification” waste oil (as defined in the “Waste Oil Management Rules”) shall be burned in Boiler #1.

Note, a one-time analysis of the waste oil was performed and is considered a typical percent sulfur for waste oil burned in the future.

A log shall be maintained recording the quantities of specification and off-specification waste oil burned in Boiler #1 and shall be made available to the Department upon request.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- R. Ash from Boiler #1 grate and flyash shall be disposed of in accordance with the Bureau of Remediation and Waste Management (BRWM). Ash shall be sufficiently conditioned with water or transported in covered containers so as to prevent fugitive emissions.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- S. Should wind action or handling of reclamation of wood chips result in visible emissions in excess of 5% opacity, the chips shall be controlled to eliminate visible emissions in excess of 5% opacity on a six (6) minute average.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- T. Exemptions of emissions from startups, shutdowns, and malfunctions shall be considered on a case by case basis by the Department pursuant to 38 M.R.S.A. §590-5. All emissions occurring during a malfunction shall be recorded and reported in accordance with 38 M.S.R.A. §349 et reg., and all other applicable laws.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- U. Boralex-Ashland shall notify the regional Air Bureau inspector and Air Bureau Licensing section of any fuel pile fires by the next business day.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

(15) Diesel Generator (Diesel #2)

- A. Emissions from Diesel #2 shall not exceed the following limits:

Pollutant	lb/hr	Lb/MMBtu
PM	0.44	0.12
PM ₁₀	0.44	n/a
SO ₂	0.19	n/a
NO _x	16.32	n/a

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CO	3.52	n/a
VOC	1.30	n/a

- B. The sulfur content of the diesel fuel used in Diesel #2 shall not exceed 0.05% sulfur by weight. Fuel oil logs shall be kept which include purchase receipts indicating gallons and percent sulfur by weight. Boralex Ashland may deplete their current stock of diesel fuel for Diesel #2. Any further diesel fuel purchases for Diesel #2 shall not exceed 0.05% sulfur by weight.
[MEDEP Chapter 140, BPT]
- C. Diesel #2 shall not operate more than 500 hours per year or fire more than 13,500 gallons of diesel fuel per year based on a 12 month rolling total. Fuel use records for Diesel #2 shall be kept through purchase receipts indicating gallons and percent sulfur by weight.
[MEDEP Chapter 140, BPT]
- D. Visible emissions shall not exceed an opacity of 20% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.
[MEDEP Chapter 140, BPT]
- E. Emissions from Diesel #2 shall vent to Stack #2 which shall be at least 45 feet AGL.
[MEDEP Chapter 140, BPT]
- (16) A log for Boiler #1 and Diesel #2 shall be maintained showing preventative maintenance actions being performed.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**
- (17) General Process Sources
All wood conveyors and transfer points shall be covered or enclosed. Visible emissions from any general process source (including chippers) shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**
- (18) Fugitive Emissions
Potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, based on a 3 minute block average.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

(19) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.

[40 CFR, Part 82, Subpart F]

(20) **CEMS, COMS, and Parameter Monitors**

The CEMS, COMS, and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. Boralex Ashland shall comply with the following:

A. Performance Specifications [MEDEP Chapter 117]

All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

1. If the continuous emission monitoring system for the gaseous emissions is recording accurate and reliable data less than 90% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures of unavoidable malfunctions.
2. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction so the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
3. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations.

4. Develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

B. Recordkeeping [MEDEP Chapters 117 and 140, BPT]

For all of the continuous emission monitoring systems (CEMS), continuous opacity monitor system (COMS), equipment parameter monitoring and recording, required by this license, the licensee shall maintain records of the most current six year period and the records shall include:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and
2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
3. For all CEMS and COMS, the records shall include:
 - a. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
 - b. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P;
 - c. Upon the written request by the Department a report or other data indicative of compliance with the applicable emission standard for those periods when the CEMS or COMS were not in operation or produced invalid data. Methods allowed by 40 CFR Part 75 may be used to demonstrate compliance with applicable emission standards. Evidence indicating normal operations shall constitute such reports or other data indicative of compliance with applicable emission standards. In the event the Bureau of Air Quality does not concur with the licensee's compliance determination, the licensee shall, upon the Bureau of Air Quality's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard; and
 - d. A 24-hour block average basis shall be calculated as the arithmetic average of not more than 24 – one hour block periods. Only one 24-hour block average shall be calculated for one day, beginning at midnight. A valid 24-hour block average must contain at least 12 hours during which operation occurred. Hours in which no operation occurs shall not be included in the 24-hr block average calculation.

C. Quarterly Reporting

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following,

for excess events, for the parameter monitors, control equipment, Continuous Emission Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) required by this license:

1. All control equipment downtimes and malfunctions;
2. All CEMS or COMS downtimes and malfunctions;
3. All parameter monitor (Boiler #1 steam flow) downtimes and malfunctions;
4. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
 - a. Standard exceeded;
 - b. Date, time, and duration of excess event;
 - c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
 - d. A description of what caused the excess event;
 - e. The strategy employed to minimize the excess event; and
 - f. The strategy employed to prevent reoccurrence.
5. A report certifying there were no excess emissions, if that is the case.
[MEDEP Chapter 117]

(21) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due **January 30th** and **July 30th** of each year.

- A. Each semiannual report shall include a summary of the periodic monitoring required by this license. The periodic monitoring required by this license is as follows:
1. Hourly fuel oil flow into Boiler #1
 2. Quantity of each fuel burned in Boiler #1 each day (wood, oil, waste oil)
 3. A statement indicating the Primary and Secondary ESP voltages for each boiler were recorded and are available to the Department upon request and note which days were not recorded.
 4. A statement indicating the daily Primary and Secondary ESP currents for each boiler were recorded and are available to the Department upon request and note which days were not recorded.
 5. A statement indicating the urea mixture flow rate monitor data was recorded once per shift during operation is available to the Department upon request and note which days were not recorded.
 6. Boiler #1 particulate matter stack testing results, when performed
 7. Quantity of fuel burned in the generator and fire pump
 8. #2 fuel oil sulfur content
 9. Diesel fuel oil sulfur content

- B. Each semiannual report shall include the annual capacity factor of Boiler #1 for each fuel.
- C. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140]

(22) **Annual Compliance Certification**

The licensee shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due **January 30, 2003** and each subsequent annual compliance certification is due **January 30** of each year.
[MEDEP Chapter 140]

(23) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department, by **September 1**, the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437

(24) The licensee is subject to the State and Federal regulations listed below:

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(25) Miscellaneous Emission Units

Emission Unit	Origin and Authority	Requirement Summary
Diesel Fire Pump	Chapter 101, Section 2(A), Chapter 140, BPT	Visible emissions shall not exceed an opacity of 20 percent on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a 3-hour period.

[MEDEP Chapter 140, BPT]

(26) Diesel Fire Pump

The diesel fire pump shall not operate more than 500 hours per year or fire more than 5,110 gallons per year, 0.05% sulfur (documented through supplier fuel records) diesel fuel, based on a 12 month rolling total. Fuel use records for the emergency diesel fire pump shall be kept through purchase receipts indicating gallons and percent sulfur by weight. Boralex Ashland may deplete their current stock of diesel fuel for the diesel fire pump. Any further diesel fuel purchases for the diesel fire pump shall not exceed 0.05% sulfur by weight.

[MEDEP Chapter 140, BPT]

(27) **Certification by a Responsible Official**

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official.

[MEDEP Chapter 140]

(28) Boralex Ashland shall pay the annual air emission license fee within 30 days of **April 30th** of each year. Pursuant to Title 38 §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under Title 38 §341-D, subsection 3.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

Boralex Ashland, Inc.
Aroostook County
Ashland, Maine
A-577-70-A-I

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DEPARTMENTAL
FINDINGS OF FACT AND ORDER
PART 70 AIR EMISSION LICENSE

(29) This term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of Phase I application March 24, 1998
Date of Phase I application acceptance March 24, 1998
Date of initial receipt of Phase II application: October 15, 1999
Date of Phase II application acceptance: October 24, 1999

Date filed with Board of Environmental Protection _____

This Order prepared by Mark E. Roberts, Bureau of Air Quality