Boralex Athens Energy Incorporated	**)**	**Departmental**
Somerset County	**)**	**Findings of Fact and Order**
Athens, Maine	**)**	**Part 70 Air Emission License**
A-371-70-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 Athens Energy Incorporated (BAE)
LICENSE NUMBER	A-371-70-A-I
LICENSE TYPE	Initial Part 70 License
SIC CODES	4911 – Electrical Generation
NATURE OF BUSINESS	Electric Generating Station
FACILITY LOCATION	Route 150, North Athens
DATE OF LICENSE ISSUANCE	October 24, 2000
LICENSE EXPIRATION DATE	October 24, 2005

B. Emission Equipment

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

EMISSION UNIT ID	MFG/INSTALLED	UNIT CAPACITY	UNIT TYPE
Boiler 1	1986/ 1986	265.2 MMBtu/hr	Wood fired boiler
Diesel Unit 1	1987/ 1987	3.52 MMBtu/hr	Emergency generator
Diesel Unit 2	1987/ 1987	2.45 MMBtu/hr	Emergency fire pump

BAE has additional insignificant activities not listed in the emission equipment table above, but may be found in the application submitted in May of 1996.

C. Application Classification

The application for BAE 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. Boiler 1

Boiler 1 is a Babcock & Wilcox Boiler, manufactured and installed in 1986 with a maximum design heat input capacity of 265.2 MMBtu/hr firing wood fuel and is therefore subject to provisions of NSPS requirement 40CFR Part 60, Subpart Db.

BAE burns Construction/Demolition Wood Debris (CDWD) in Boiler #1 in addition to conventional wood fuel. Up to seventy one (71%) 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) with 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.

BAE also uses off-spec fiber from Cascades Auburn Fiber, Inc. as a replacement fuel for wood fired in Boiler 1.

The operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP) control particulate emissions from Boiler 1. BAE operates two banks of ESP fields.

Streamlining

1. 40CFR Part 60.43b(c)(1), (f), (g) and MEDEP Regulations Chapter 103 regulate particulate matter (PM). However, Best Practical Treatment (BPT) in the current license is more stringent.

2. NO_x is subject to Chapter 138, however the BPT emission limit in the current license is more stringent.

3. MEDEP Chapter 101 is applicable for visible emissions. However, 40 CFR Part 60.43b(f) and BPT in the current license is more stringent.

4. 40 CFR Part 60 and Chapter 117 require the use of Continuous Opacity Monitors (COM).

5. 40 CFR Part 60.13 and Chapter 117 detail the sampling frequency of the CEM and COM.

Periodic Monitoring

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

Electrostatic Precipitator (ESP) primary and secondary voltages shall be recorded as periodic monitoring for particulate matter emissions.

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

Demonstrated NO_x, CO and opacity limits through CEM, periodic monitor and COM data provides reasonable assurance the VOC emissions are being met.

BAE requested and applied for an exemption of the opacity standards under statute which was compiled in Air Emission license A-371-72-B-A/R. Visible emissions from Boiler 1 shall be deemed in compliance with the visible emission requirements of this license, if the Department has determined that the period of time, which has been identified and proposed by BAE, is a cold startup of Boiler 1. Cold startup opacity record keeping shall consist of the following where a cold startup is defined as:

a. the beginning saturation metal temperature of Boiler #1, measured at the probe box on the steam drum, is less than or equal to 100 ^{o}F;
b. the steam pressure in the steam drum is raised at a controlled rate from 0 to 900 psig;
c. the furnace gas temperatures, measured at the upper furnace area, are maintained below 700 ^{o}F;
d. the superheater steam temperature must be 75 ^{o}F or greater than steam drum saturation temperature; and
e. the temperature of the gas passing through the precipitator, measured by a stack probe at the precipitator inlet, must be maintained at 200 ^{o}F for a minimum of 2 hours and the oxygen percentage must be 10% or less prior to energizing.

A. For each period that is a cold startup of Boiler #1, BAE shall:
   1. Maintain records of opacities which are greater than 20% on a six minute average; and
   2. Report each of these periods in the quarterly report. These periods shall not be reported in the excess emissions section of the quarterly report.

B. BAE shall continuously monitor and record once every hour, the following surrogate parameter values during a cold startup:
   1. the saturation metal temperature of Boiler 1;
   2. the steam pressure;
   3. the furnace gas temperatures;

4. the superheater steam temperature and the steam drum saturation temperature; and
5. the temperature of the gas passing through the precipitator and oxygen percentages.

C. The period of opacity allowance for a cold startup of Boiler 1:

1. shall begin once fire has been put into Boiler 1;
2. shall not exceed a maximum period of 18 hours, not to include periods of time which are determined by the Department to be unavoidable malfunctions to 38 M.R.S.A., Section 349 Subsection 9; and
3. shall be implemented in the following manner:

Upon initiating the fire in Boiler 1, the 18 hour period shall begin, and shall continue regardless if the fire is removed from the boiler. If during the 18 hours period, BAE experiences periods of time (fire in the boiler or not) which are determined by the Department to be unavoidable malfunctions pursuant to 38 M.R.S.A., Section 349 Subsection 9, those periods of time shall not be counted as part of the 18 hour period.

B. Diesel Unit 1

Diesel Unit 1 is a 470 BHP, 6 cylinder Cummings unit manufactured and installed in 1987 with a maximum design heat input capacity of 3.52 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 in the current license is more stringent.

2. Chapter 101 is applicable for visible emissions, however the BPT opacity limit in the current license 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, there is no reasonable likelihood of the diesel unit to exceed opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing in accordance with 40CFR Part 60, Appendix A, Method 9 is not required.

However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

C. Miscellaneous Emissions Unit

The miscellaneous emission unit is a 2.45 MMBtu/hr diesel fire pump.

Streamlining

1. Chapter 106 regulates fuel sulfur content, however the BPT sulfur limit in the current license is more stringent.

2. Chapter 101 is applicable for visible emissions, however the BPT opacity limit in the current license 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, there is no reasonable likelihood of the diesel unit to exceed opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing in accordance with 40CFR Part 60, Appendix A, Method 9 is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

D. General Process Sources

Wood chippers, conveyors and transfer points shall be covered or enclosed. Any conveyor totally within a building shall be considered enclosed.

Periodic Monitoring

Based on best management practices, there is no reasonable likelihood of fugitive emission sources to exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emission is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

E. Fugitive Emissions

Fugitive particulate matter sources at BAE include material stockpiles and roadways.

Periodic Monitoring

Based on best management practices and wetting roads and storage piles with water when appropriate, there is no reasonable likelihood of fugitive emission sources to exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emission is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

F. 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 260,000 tons per year (4,500 Btu/lb, 50% moisture, or equivalent)
- Boiler #1 CDWD wood use of 184,600 tons per year (7,500 Btu/lb, 17% moisture, or equivalent)
- Boiler #1 waste fiber use of 52,000 tons per year.
- Diesel Unit 1 fuel use of 12,750 gallons per year of diesel fuel (0.05% sulfur by weight).
- Diesel Unit 2 fuel use of 8,750 gallons per year of diesel fuel (0.05% sulfur by weight).

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

Pollutant	TPY
PM	35.2
PM_{10}	35.2
SO_2	23.4
NO_X	321.5
CO	408.5
VOC	9.3
Lead	0.46

III. AIR QUALITY ANALYSIS

There have been no modifications to the facility, therefore the existing analysis performed for BAE's 1994 Air Emission License, A-371-72-B/A/R, which demonstrated compliance with MAAQS and Class I and Class II 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 the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission 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-371-70-A-I, subject to the following conditions:

For each condition that is State Enforceable only, it is designated so with the following statement: **Enforceable by State Only.** All other conditions are federally enforceable.

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 emission 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;

(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) 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;

(4) 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;
Enforceable by State-only

(5) The licensee shall pay the annual air emissions license fee to the Department, calculated pursuant to Title 38 MRSA §353;

(6) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;

(7) 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;
Enforceable by State-only

(8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

(9) 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.

(10) Terms and conditions are enforceable by EPA and citizens under the CAA nless specifically designated as state enforceable.

(11) 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;

(12) 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 emissions testing; and

(c) submit a written report to the Department within thirty (30) days from the date of test completion.

Enforceable by State-only

(13) 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 where 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 a interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

Enforceable by State-only

(14) 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.

(15) 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.

(16) 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.

(17) 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. The licensee shall notify the Department within two (2) days or the next working day, whichever is later, of such occasions and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

(18) 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.

(19) The licensee shall submit quarterly reports of any required monitoring as required by the Department. 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.

(20) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequent if specified in the Applicable requirement 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;

(21) 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 the 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 the 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 emission standards or other terms of 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.

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

SPECIAL CONDITIONS

(23) 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 May, 1996.

SOURCE		CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Boiler 1	a.	40CFR 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 waste oil firing.
Diesel 2	b.	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.

(24) **Boiler 1**

A. Boiler 1 steam production shall be limited to 150,000 #/hr on an eight hour block average (equivalent heat input rate of 265.2 MMBtu/hr of wood fuel). BAE shall monitor and record steam flow rate continuously for Boiler #1.

The steam flow monitor (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 (equivalent to 43.8 hours per quarter), 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] **Enforceable by State Only**

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

Pollutant	lb/MMBtu	Origin and Authority
PM	0.03	MEDEP Chapter 140, BPT
PM_{10}	0.03	MEDEP Chapter 140, BPT
NO_x	0.30	MEDEP Chapter 140, BPT

NO_x: The 0.30 lb/MMBtu limit is on a 24 hour daily block average, via CEM. The NO_x CEM shall be installed and certified on the breaching of Boiler 1 to the stack. BAE shall maintain the NO_x CEM in accordance with Chapter 117. The sampling frequency for the CEM shall meet the monitoring requirements of 40 CFR Part 60.13.
[MEDEP Chapter 140, BPT]

C. BAE shall utilize a CO periodic monitor to indicate CO emission levels: a maximum of 0.35 lb/MMBtu (based on a 30 day rolling average) and a maximum of 0.45 lb/MMBtu (based on a 24 hour bock average). A Relative Accuracy Test (RATA), Cylinder Gas Audit (CGA) and/or Performance Audit shall be conducted on the CO periodic monitor quarterly. Results from the RATA, CGA or Performance Audit shall be submitted to the Department within 30 days of testing. The relative accuracy (RA) requirements for the CO periodic monitor shall be 10% in units of PPM or 20% in units of lb/MMBtu.
[MEDEP Chapter 140, BPT]

D. Compliance with the PM, PM_{10}, SO_2, NO_x, CO, VOC and Lead lb/hr limits are on a one (1) hour average and shall be demonstrated upon request by the DEP or EPA by a stack test in accordance with this license.

Pollutant	lb/hour	TPY
PM	8.0	34.9
PM_{10}	8.0	34.9
SO_2	5.3	23.2
NO_x	71.6	313.6
CO *	119.3	406.6
VOC	2.0	8.8
Lead	0.106	0.46

*NOTE: The 119.3 lb/hr limit is based on 0.45 # CO/MMBtu and the 406.6 TPY limit is based on 0.35 # CO/MMBtu.

[MEDEP Chapter 140, BPT]

E. Emissions from Boiler 1 shall vent to Stack 1 which shall be at least 135 feet AGL and represent greater than 60% of the formula GEP stack height.
[MEDEP Chapter 140, BPT]

F. Particulate matter (PM, PM_{10}) emissions from Boiler 1 shall be controlled by the operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP).
[MEDEP Chapter 140, BPT]

G. BAE shall operate both ESP fields for Boiler 1 during normal plant operating conditions.
[MEDEP Chapter 140, BPT]

Electrostatic Precipitator (ESP) primary and secondary voltages shall be recorded once per day while the facility is operational.

Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Air Emission Compliance Test Protocol, BAE may perform additional particulate emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall BAE be relieved of its obligation to meet its licensed emission limits.
[MEDEP Chapter 140, BPT]

H. BAE 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%. This opacity standard shall apply at all times, except during periods of cold startups where defined below.

Cold Startups
Visible emissions from Boiler 1 shall be deemed in compliance with the visible emission requirements of this license, if the Department has determined that the period of time, which has been identified and accepted by BAE, is a cold startup of Boiler 1.

1. The following shall constitute a cold startup of Boiler 1:

    a. the beginning saturation metal temperature of Boiler 1, measured at the probe box on the steam drum, is less than or equal to 100 ^{o}F;
    b. the steam pressure in the steam drum is raised at a controlled rate from 0 to 900 psig;
    c. the furnace gas temperatures, measured at the upper furnace area, are maintained at 700 ^{o}F or less;
    d. the superheater steam temperature must be 75 ^{o}F or greater than steam drum saturation temperature; and
    e. the temperature of the gas passing through the precipitator, measured by a stack probe at the precipitator inlet, must be maintained at 200 ^{o}F for a minimum of 2 hours and the oxygen percentage must be 10% or less prior to energizing.

2. For each cold startup period, BAE shall:

   a. Maintain records of opacities which are greater than 20% on a six minute average; and
   b. Report each of these periods in the quarterly report. These periods shall not be reported in the excess emissions section of the quarterly report.

3. BAE shall continuously monitor and record once every hour, the following surrogate parameter values indicative of a cold startup:

   a. the saturation metal temperature of Boiler 1;
   b. the steam pressure;
   c. the furnace gas temperatures;
   d. the superheater steam temperature and the steam drum saturation temperature; and
   e. the temperature of the gas passing through the precipitator and oxygen percentages.

4. The period of opacity allowance for a cold startup of Boiler 1:

   a. shall begin once fire has been put into Boiler 1;
   b. shall not exceed a maximum period of 18 hours, not to include periods of time which are determined by the Department to be unavoidable malfunctions to 38 M.R.S.A., Section 349 Subsection 9; and
   c. shall be implemented in the following manner:

      Upon initiating the fire in Boiler 1, the 18 hour period shall begin, and shall continue regardless if the fire is removed from the boiler. If during the 18 hours period, BAE experiences periods of time (fire in the boiler or not) which are determined by the Department to be unavoidable malfunctions pursuant to 38 M.R.S.A., Section 349 Subsection 9, those periods of time shall not be counted as part of the 18 hour period.

I. Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system (COM). The COM shall be installed and certified on the breaching of the ESP to the stack or in the stack. BAE shall maintain the COM in accordance with Chapter 117. BAE shall meet the monitoring requirements of 40CFR Part 60.13 with regards to the sampling frequency of the COM.
[MEDEP Chapter 140, BPT]

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

40 CFR Part 60 Subpart Db requires maintaining records of the amount of fuels combusted each day and calculation of annual capacity factor for each calendar quarter. This requirement was directed toward multifuel boilers to determine the annual capacity firing fossil fuel. EPA Region I determined this requirement is not meant to apply to 100% wood fired systems. However, BAE will be required to 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 month and submitted annually
[MEDEP Chapter 140, BPT]

K. BAE shall limit the annul fuel usage and quarterly feed rate (based on purchase records which quantify the type and quantity of CDWD) into Boiler #1 to up to seventy one (71%) percent by weight of the annual fuel use may be CDWD, which for the purpose of this license shall be chipped wood demolition debris which is 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.

L. BAE shall limit the annual fuel usage and quarterly feed rate (based on purchase records which quantify the type and quantity of fiber) into Boiler #1 to 52,000 tons per year of off-spec waste fiber (as fired).
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

M. BAE may burn no more than 1,000 gallons per year of waste oil 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.

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]

N. BAE shall conduct particulate emission testing and demonstrate compliance at least once every two years on Boiler 1. The initial test to be conducted within one year of the signature date of the license.
[MEDEP Chapter 140, BPT]

O. Ash from Boiler 1 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 sealed containers so as to prevent fugitive emissions.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

P. Should wind action or handling of wood chips result in visible emissions in excess of 5% opacity, the chips shall be wetted with sufficient water to eliminate visible emissions in excess of 5% opacity on a six (6) minute average.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

(25) **Diesel Unit 1** (Emergency Diesel Generator)

A. Diesel Unit 1 shall not exceed a heat input rate of 3.52 MMBtu/hr of diesel fuel.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

B. Emissions from Diesel Unit 1 shall not exceed the following limits:

Pollutant	**lb/MMBtu**	**lb/hr**	**TPY**
PM	0.12	0.42	0.1
PM_{10}	n/a	0.42	0.1
SO_2	n/a	0.54	0.1
NO_x	n/a	20.42	5.2
CO	n/a	5.46	1.4
VOC	n/a	1.13	0.3

[MEDEP Chapter 140, BPT]

C. The sulfur content of the diesel fuel used in Diesel Unit 1 shall not exceed 0.05% sulfur by weight.
[MEDEP Chapter 140, BPT]

D. Diesel Unit 1 shall not operate more than 500 hours per year (12,750 gallons per year of diesel fuel) based on a 12 month rolling total. Hours of operation and fuel use records for the emergency diesel generator shall be kept through purchase receipts indicating gallons and percent sulfur by weight
[MEDEP Chapter 140, BPT]

E. 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 block.
[MEDEP Chapter 140, BPT]

(26) **Miscellaneous Emission Units**

Emission Unit	Origin and Authority	Requirement Summary
Emergency 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

(27) **Emergency Diesel Fire Pump**
The emergency diesel fire pump shall be limited to 500 hours per year of operation, firing 0.05% sulfur (documented through supplier fuel records) #2 fuel oil, based on a 12 month rolling total. Hours of operation and fuel use records for the emergency diesel fire pump shall be kept through purchase receipts indicating gallons and percent sulfur by weight.
[MEDEP Chapter 140, BPT]

(28) A log for Boiler 1 and Diesel Unit 1 shall be maintained showing preventative maintenance actions being performed.
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

(29) **General Process Sources**
The wood chipper, conveyors and transfer points shall be covered or enclosed. Visible emissions from any general process source 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**

(30) **Fugitive Emissions**
Potential sources of fugitive PM emissions, including material stockpiles and 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**

(31) **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]

(32) **NO_x CEMS, COMS, and Parameter Monitors**
The NO_x 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. BAE shall comply with the following:
[MEDEP Chapter 140, BPT]

A. **Performance Specifications**

The NO_x 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 Departments 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 NO_x 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.
   [MEDEP Chapter 117]

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 of unavoidable malfunctions.
   [MEDEP Chapter 117]

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 the NO_x CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

B. **Recordkeeping**

For all of the continuous emission monitoring (CEMS), continuous opacity monitor (COM), 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 [MEDEP Chapter 117]

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.
[MEDEP Chapter 117]

3. For all CEMS and COM, the records shall include:

   a. Documentation that all CEMS and COM 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;
   [MEDEP Chapter 117]

   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;
   [MEDEP Chapter 117]

   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
   [MEDEP Chapter 140, BPT]

   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. [MEDEP Chapter 140, BPT]

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 the control equipment, parameter monitors, 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 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]

(33) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due with every other quarterly report, and the initial semiannual report is due April 30, 2001 with the second quarterly report submitted following the date of signature of this license.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license.
B. 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]

(34) **Annual Compliance Certification**

BAE shall submit an annual compliance certification to the Department in accordance with Condition (20) of this license. The initial annual compliance certification is due October 30, 2001 with the submittal of the second semiannual report after the signature date of this license.

[MEDEP Chapter 140]

(35) **Annual Emission Statement**

The licensee shall annually report to the Department, in a specified format, fuel use, operating rates, use of materials and other information necessary to accurately update the State's emission inventory.
[MEDEP Chapter 137]

(36) The licensee is also subject to the State and Federal regulations listed below.

CITATION	REQUIREMENT SUMMARY
Chapter 102	Open Burning
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 130	Solvent Degreasers

[MEDEP Chapter 140, BPT]

(37) **Certification by a Responsible Official**
All documents and 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]

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

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2000.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application 05/13/1996
Date of application acceptance 10/28/1996

Date filed with Board of Environmental Protection _____

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