

Beaver Wood Joint Venture)  
Penobscot County )  
Chester, Maine )  
A-172-70-A-I )

**DEPARTMENTAL  
FINDINGS OF FACT AND ORDER  
PART 70 AIR EMISSION LICENSE**

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	Beaver Wood Joint Venture (BWJV)
LICENSE NUMBER	A-172-70-A-I
LICENSE TYPE	Initial Part 70 License
NAIC CODES	4911 – Electrical Generation
NATURE OF BUSINESS	Electric Generating Station
FACILITY LOCATION	Route 116, Chester
DATE OF LICENSE ISSUANCE	
LICENSE EXPIRATION DATE	

B. Emission Equipment

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

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
Boiler #1	256.9 MMBtu/hr	Wood boiler
Diesel Generator	1.05 MMBtu/hr	Generator
Diesel Fire Pump	1.38 MMBtu/hr	Fire Pump

BWJV has additional activities not listed in the emission equipment table above, that are insignificant, but may be found in the application submitted in October of 1997.

C. Application Classification

The application for BWJV 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

BWJV is a wood-fired electric generating facility in Chester, Maine. The facility has been in a state of cold standby since it was shutdown in March of 1994. Wood fuel is fed from five individual screw feeder bins directly to the spreader stoker where fuel is blown across a trajectory plate and into the furnace portion of the boiler. Fuel is distributed on the fixed grate via high pressure transport air settings and the trajectory plate angle setting. Heavier particles are spread evenly on the back of the fixed 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. 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 Keeler/Dorr-Oliver boiler, manufactured and installed in 1986 with a maximum design heat input capacity of 256.9 MMBtu/hr firing wood fuel and is therefore subject to New Source Performance Standards (NSPS) requirements 40CFR Part 60, Subpart Db. Boiler #1 steam production rate is 140,000 #/hr based on a feed rate of 28.5 tons/hour at 4500 Btu per pound of wood fuel.

Due to an unavailable electric power consumer, BWJV has been in a state of cold standby since it was shutdown in March of 1994. As a result, there is no NO<sub>x</sub> CEM installed on Boiler #1, but will be installed and operating within 30 days of operation.

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

### **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 117 require the use of Continuous Opacity Monitors (COM). However, Chapter 117 is at least as stringent as 40 CFR Part 60.
4. 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 as 40 CFR Part 60.
5. 40 CFR 60.11(d) has been streamlined into Condition #7.
6. 40 CFR 60.11 (g) has been streamline into Condition #14.

### **Periodic Monitoring**

Initial stack test for particulate matter emission rates within 180 days of start-up (as defined by Condition 35(a)) and then once every two years after that while the boiler is in operation.

Electrostatic Precipitator (ESP) primary and secondary voltages shall be recorded as periodic monitoring for particulate matter emissions while the boiler is in operation.

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<sub>x</sub>, CO and opacity limits CEM/COM data will provide reasonable assurance the VOC emissions are being met. VOC emission data may be used to change the license limits at the next renewal.

### C. Miscellaneous Emission Units

Miscellaneous emission units consist of the following: A 150 BHP generator with a maximum design heat input capacity of 1.05 MMBtu/hr and a 197 BHP fire pump with a maximum design heat input capacity of 1.38 MMBtu/hr; both firing diesel fuel. These units are 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 should not 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 DEP is precluded from performing its own testing and may take enforcement action for any violations discovered.

#### **D. General Process Sources**

Wood chip conveyors and transfer points shall be designed to minimize fugitive emissions. 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 emission 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. Fugitive Emissions**

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

**Periodic Monitoring**

Based on best management practices and wetting roads and storage piles with water when appropriate, fugitive emission sources should not exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emission 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.

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 250,000 tons per year (4,500 Btu/lb, 50% moisture).
- 500 gallons per year of waste oil in Boiler 1.
- Diesel Generator fuel use of 3,835 gallons per year of diesel fuel (0.05% sulfur by weight).
- Diesel Fire pump fuel use of 5,000 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)

<b>Pollutant</b>	<b>TPY</b>
PM	33.94
PM <sub>10</sub>	33.94
SO <sub>2</sub>	22.53
NO <sub>x</sub>	340.17
CO	450.58
VOC	112.71

**III. AIR QUALITY ANALYSIS**

There have been no modifications to the facility, therefore the existing analysis performed for BWJV's 1994 Air Emission License A-172-72-B-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 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-172-70-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 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;
- (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 emission 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;
- (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) All terms and conditions are enforceable by EPA and citizens under the CAA unless 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 emission testing; and
- (c) submit a written report to the Department within thirty (30) days from 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 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.

**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, or this license, 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 emissions 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. Upon request, the licensee shall also furnish to the Department copies of records required to be kept by this license.

- (19) The licensee shall submit quarterly reports of any required 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.
- (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 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;
- (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 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.

- (22) 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.

**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 October, 1997.

SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Boiler 1	40 CFR Part 60.44b(c)	There is no NSPS NO <sub>x</sub> 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 Generator	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.
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.

- (24) Boiler 1

A. Boiler 1 steam production shall be limited to 140,000 #/hr. BWJV shall monitor and record steam flow rate continuously for Boiler #1.

Each 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] **Enforceable by State Only**

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

<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
PM	0.03	MEDEP Chapter 140, BPT
NO <sub>x</sub>	0.30	MEDEP Chapter 140, BPT

NO<sub>x</sub>: The 0.30 lb/MMBtu limit is based on a a 24 hour daily block average, via CEM. The NO<sub>x</sub> CEM shall be installed and certified within 30 days of Boiler #1 start-up as defined in Condition 37(A). BWJV shall maintain the NO<sub>x</sub> CEM in accordance with Chapter 117. The CEM shall meet the monitoring requirements of 40 CFR Part 60.13.  
 [MEDEP Chapter 140, BPT]

CO: The 0.40 lb/MMBtu limit is based on a 30 day rolling average basis via CEM. The CO CEM shall be installed and certified on the breaching of Boiler 1 to the stack. BWJV shall maintain the CO CEM in accordance with Chapter 117. The CEM shall meet the monitoring requirements of 40 CFR Part 60.13.  
 [MEDEP Chapter 140, BPT]

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

<b>Pollutant</b>	<b>lb/hour</b>
PM	8.0
PM <sub>10</sub>	8.0
SO <sub>2</sub>	5.3
NO <sub>x</sub>	71.6
CO	119.3
VOC	29.2

PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC : Lb/hr limits are on a one (1) hour average and may be required to be demonstrated upon request by a stack test in accordance with this license.

[MEDEP Chapter 140, BPT]

- D. Compliance with the PM, CO and VOC emission rates shall be demonstrated within 180 days of Boiler #1's startup, as defined by Condition 35a, with methods approved by the Department. Thirty (30) days prior to testing, the licensee shall arrange for Department observation of the test. Within 30 days of testing, the licensee shall maintain test ports (in accordance with the criteria of EPA Test Method One), and test platforms if necessary, and all other support equipment necessary to allow emission compliance testing.

[MEDEP Chapter 140, BPT]

- E. Emissions from Boiler 1 shall vent to Stack 1 which shall be at least 130 feet AGL and represent greater than 60% of the formula GEP stack height.

[MEDEP Chapter 140, BPT]

- F. Particulate matter (PM, PM<sub>10</sub>) emissions from Boiler 1 shall be controlled by the operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP). ESP primary and secondary voltages shall be recorded once per shift.

[MEDEP Chapter 140, BPT]

- G. BWJV shall operate all three ESP fields for Boiler 1 during normal plant operating conditions.

[MEDEP Chapter 140, BPT]

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

[MEDEP Chapter 140, BPT]

- H. BWJV 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 as outlined in MEDEP Chapter 101, Section 3(e).

[MEDEP Chapter 140, BPT]

- 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. BWJV shall maintain the COM in accordance with Chapter 117 and 40 CFR Part 60.13.

[MEDEP Chapter 140, BPT]

- J. Boiler 1 is subject to 40 CFR Part 60 Subparts A and Db and BWJV 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 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, BWJV 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. BWJV may burn no more than 500 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]

- L. A one-time analysis of the waste oil shall be performed prior to the next restart, to determine if the waste oil is “specification” or “off-specification” waste oil (as defined in the “Waste Oil Management Rules”) as well as the percent sulfur present. This data shall be recorded and sent to the Department and will be considered a typical percent sulfur for waste oil burned in the future.

[MEDEP Chapter 140, BPT]

- M. Ash from Boiler 1 grate, mud-drum, and flyash shall be disposed of in accordance with the requirements of 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**

- N. Wood 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**
- O. BWJV shall continuously monitor and record the steam flow rate for Boiler 1 in accordance with Condition 24(A).  
[MEDEP Chapter 140, BPT] **Enforceable by State Only**
- P. BWJV shall meet the monitoring requirements of 40 CFR Part 60.13 with regards to the sampling frequency of the CEM and COM.  
[MEDEP Chapter 140, BPT]
- Q. BWJV shall conduct particulate emission testing and demonstrate compliance at least once every two years on Boiler #1 (the two year clock to be started after the initial compliance demonstrated in Condition 24D).
- (25) A log for Boiler 1 shall be maintained showing preventative maintenance actions being performed.  
[MEDEP Chapter 140, BPT] **Enforceable by State Only**
- (26) **General Process Sources**  
Visible emissions from any general process source (wood conveyors, chippers, transfer points, etc.) shall be controlled so as to 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**
- (27) **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]
- (28) **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. Champion shall comply with the following: [MEDEP Chapter 140, BPT]

**A. Performance Specifications**

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 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 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 all 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 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]

(29) **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 January 30, 2000 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]

(30) **Annual Compliance Certification**

BWJV shall submit an annual compliance certification to the Department in accordance with Condition (20) of this license. The initial annual compliance certification is due July 30, 2000 with the submittal of the second semiannual report after the signature date of this license. [MEDEP Chapter 140]

(31) **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] **Enforceable by State only**

B. Stack Testing

1. The licensee shall conduct emission testing, and demonstrate compliance with the applicable standard, on Boiler #1 within 60 days after receipt of notice from the Air Bureau:
2. The licensee shall conduct particulate emission testing and demonstrate compliance at least once every two years on Boiler #1 (the two year clock to be started after the initial compliance demonstrated in Condition 24D).

3. All testing programs shall comply with all of the requirements of the DEP Compliance Test Protocol and with 40 CFR Part 60, as appropriate, or other methods approved by the Bureau of Air Quality.

[MEDEP Chapter 140, BPT]

(32) Miscellaneous Emission Units

Emission Unit	Origin and Authority	Requirement Summary
Diesel Generator	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
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]

(33) Diesel Generator

The diesel generator shall be limited to 500 hours per year of operation (3,835 gallons per year), 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]

(34) Diesel Fire Pump

The diesel fire pump shall be limited to 500 hours per year of operation (5,000 gallons per year), 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]

(35) The license is subject to the State and Federal regulations listed below:

Chapter 102	Open Burning
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 113	Growth Offset Regulation

- (36) Any document (including reports) required by this license must be signed by the responsible official.  
[MEDEP Chapter 140, BPT]
- (37) a. Boiler 1, at the time of the signature date below, was not operating due to an unavailable electric power consumer. Therefore, startup of Boiler 1 shall be defined as the time that Boiler 1 begins to operate under a newly signed contract for electrical power production supply. A certified statement attesting to the date of signature of the contract agreement shall be made available to the Department within 5 days of power contract signing.
- b. BWJV shall notify the Department, by a written notification within 5 working days, the date of startup of Boiler 1.
- c. Any periods of operation prior to startup BWJV shall notify the Department, by a written report within 5 working days, quantifying the duration of Boiler 1 operation.
- d. The NO<sub>x</sub> CEM shall be installed and certified within 30 days of Boiler 1 startup (as defined by Condition 37a).  
[MEDEP Chapter 140, BPT]

(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      1999.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA G. KIRKPATRICK, COMMISSIONER

Beaver Wood Joint Venture            )  
Penobscot County                    )  
Chester, Maine                        )  
A-172-70-A-I                         21

DEPARTMENTAL  
FINDINGS OF FACT AND ORDER  
PART 70 AIR EMISSION LICENSE

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application 10/15/1997

Date of application acceptance 10/17/1997

Date filed with Board of Environmental Protection \_\_\_\_\_

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