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| C. H. Sprague & Son Co. |) | Departmental |
| Hancock County |) | Findings of Fact and Order |
| Bucksport, Maine |) | Air Emission License |
| A-115-71-F-M/R |) | |

After review of the air emissions license renewal 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

C. H. Sprague & Son Company, a petroleum storage and distribution facility, of Bucksport, Maine, has applied to renew their Air Emission License. The renewal is for the operation of two oil fired boilers.

C. H. Sprague & Son Company has also requested to have their annual fuel limit increased from 150,000 gallons to 175,000 gallons.

B. Emission Equipment

C. H. Sprague & Son Company is authorized to operate the following air emission units:

Fuel Burning Equipment

| <u>Equipment</u> | <u>Date of Construction</u> | <u>Maximum Capacity</u> | <u>Fuel Type, %Sulfur</u> | <u>Maximum Firing Rate</u> | <u>Stack #</u> |
|------------------|-----------------------------|-------------------------|---------------------------|----------------------------|----------------|
| Boiler #1 | 1966 | 6.3 MMBtu/hr | #6 oil, 2.0 % | 42 gal/hr | 1 |
| Boiler #2 | 1971 | 8.4 MMBtu/hr | #6 oil, 2.0 % | 56 gal/hr | 2 |

Process equipment includes two storage tanks that house 10,000,000 gallons of #6 fuel oil.

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as given in Maine's Air Regulations.

| <u>Pollutant</u> | <u>Net Change</u> | <u>Sig.Level</u> |
|------------------|-------------------|------------------|
| | (TPY) | (TPY) |
| PM | 0.35 | 100 |
| PM ₁₀ | 0.35 | 100 |
| SO ₂ | 3.93 | 100 |
| NO _x | 0.88 | 100 |
| CO | 0.06 | 100 |
| VOC | 0.01 | 50 |

This modification is determined to be a minor revision and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boiler #1 & Boiler #2

Boiler #1 is a 1966 Cleaver Brooks boiler with a design capacity of 6.3 MMBtu/hr operating on #6 fuel oil having a maximum sulfur content of 2.0%.

Boiler #2 is a 1971 Cleaver Brooks boiler with a design capacity of 8.4 MMBtu/hr operating on #6 fuel oil having a maximum sulfur content of 2.0%.

Neither boiler is subject to New Source Performance Standards (NSPS) Subpart Dc, which is only applicable to boilers with a heat input between 10 MMBtu/hr and 100 MMBtu/hr and manufactured after June 9, 1989.

BPT for Boiler #1 and #2 is the following:

- Fuel sulfur content is regulated by MEDEP Regulations, Chapter 106.
- SO₂, CO and VOC emission rates are based on AP-42 data dated 10/96 for boilers firing #6 fuel oil and having a heat input of 0.1 to 10 MMBtu/hr.
- NO_x rates are based on industry experience with boilers of similar size firing #6 fuel oil.
- Emission rates for PM and PM₁₀ are regulated by MEDEP Regulations, Chapter 103.
- Visible emissions from Stack #1 or Stack #2 (Boiler #1 and Boiler #2, respectively) shall not exceed 30% opacity on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.
- Annual fuel limit of 175,000 gallons per year of 2.0 % sulfur #6 fuel oil.

F. Annual Emission Restrictions

C. H. Sprague & Son Co. shall be restricted to the following annual emissions based on firing no more than 175,000 gallons per year of 2.0 % sulfur #6 fuel oil (12 month rolling total):

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

| <u>Pollutant</u> | <u>Tons/yr</u> |
|------------------|----------------|
| PM | 2.45 |
| PM ₁₀ | 2.45 |
| NO _x | 6.13 |
| SO ₂ | 27.48 |
| CO | 0.44 |
| VOC | 0.10 |

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis.

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Modeling and monitoring are not required of a renewal if the total emissions of any pollutant released do not exceed the following:

| <u>Pollutant</u> | <u>TPY</u> |
|------------------|------------|
| PM | 50 |
| PM ₁₀ | 25 |
| SO ₂ | 50 |
| NO _x | 100 |
| CO | 250 |
| VOC | 250 |

Based on the above total facility emissions, C. H. Sprague & Son Co. is below the emissions level required for modeling and monitoring.

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 Air Emission License A-115-71-F-M/R, subject to the following 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.
- (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 115.
- (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.
 - (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
 - (6) The 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.
 - (9) The licensee shall comply with all terms and conditions of the air emission license. 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 license or amendment shall not stay any condition of the license.
 - (10) 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.
 - (11) 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:

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- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. 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; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) 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
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) 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
 - (ii) 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
 - (iii) 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.
- (13) 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.

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and 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 state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon 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.
- (16) **Boiler #1**
- A. Capacity shall not exceed 6.3 MMBtu/hr.
- B. Emissions shall not exceed the following:

Emission Unit 1 Emission Limits

| <u>Pollutant</u> | <u>lb/MMBtu</u> | <u>lb/hr</u> |
|------------------|-----------------|--------------|
| PM | 0.20 | 1.3 |
| PM ₁₀ | n/a | 1.3 |
| SO ₂ | n/a | 14.1 |
| NO _x | n/a | 3.1 |
| CO | n/a | 0.2 |
| VOC | n/a | 0.1 |

- C. Visible emissions from Stack #1 (servicing Boiler #1), shall not exceed an opacity of 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.
- (17) **Boiler #2**
- A. Capacity shall not exceed 8.4 MMBtu/hr.

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B. Emissions shall not exceed the following:

Emission Unit 2 Emission Limits

| <u>Pollutant</u> | <u>lb/MMBtu</u> | <u>lb/hr</u> |
|------------------|-----------------|--------------|
| PM | 0.20 | 1.7 |
| PM ₁₀ | n/a | 1.7 |
| SO ₂ | n/a | 18.8 |
| NO _x | n/a | 4.2 |
| CO | n/a | 0.3 |
| VOC | n/a | 0.1 |

C. Visible emissions from Stack #2 (servicing Boiler #2), shall not exceed an opacity of 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

(18) Facility wide fuel use shall not exceed 175,000 (12 month rolling total) gallons/year #6 fuel oil having a sulfur content of 2.0% maximum by weight. Fuel use records shall be maintained on a monthly basis, in addition to the 12 month rolling total.

(19) The term of this order shall be for five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 1998.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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BY: _____
EDWARD O. SULLIVAN, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/05/98

Date of application acceptance: 10/20/98

Date filed with Board of Environmental Protection: _____

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