

VAUGHN THIBODEAU & SONS)	DEPARTMENTAL
HANCOCK COUNTY)	FINDINGS OF FACT AND ORDER
HANCOCK, MAINE)	AIR EMISSION LICENSE
A-294-71-J-M (SM))	MINOR REVISION #1

After review of the air emission 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

Vaughn Thibodeau & Sons located in Hancock, Maine has applied for a minor modification to their current Air Emission License A-294-71-I-R, permitting the operation of their ready-mix concrete plant. Vaughn Thibodeau & Sons request a minor revision to change the rating of the #2 oil-fired boiler listed in the air emissions license from 0.9 MMBtu/hr to the correct rating of 1.4 MMBtu/hr.

B. Updated Emission Equipment

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Pollution Cntrl</u>
Boiler #1	1.4 MMBtu/hr	10 gal/hr	none

II. APPLICATION CLASSIFICATION

An application is considered major depending on whether or not the emissions increases are greater than the significant emission levels, as defined in Chapter 100. Total potential emissions increases from updating the license to reflect the correct rating capacity of Boiler #1 are less than four tons per year for any one regulated pollutant and less than eight tons per year of total regulated pollutants. Therefore, emission increases are less than significance levels as defined in Chapter 100 of the Bureau of Air Quality's regulations and is thus a non-major modification.

III. REVISION DESCRIPTION

Boiler #1

Vaughn Thibodeau & Sons has requested to update the maximum heat capacity rating of Boiler #1 listed in Air Emissions License, A-294-71-I-R. Currently the size rating of Boiler #1 is 0.9 MMBtu/hr and is described in the air license as an insignificant source based on its size. However, after closer inspection it was determined that the nozzle was rated for 0.9 MMBtu/hr but the actual rating of the unit itself is 1.4 MMBtu/hr. Therefore, this license amendment will address this correction and update the license with the appropriate Best Practical Treatment analysis, pollutant emissions and fuel usage limits.

Best Practical Treatment

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 Department 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.
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Vaughn Thibodeau & Sons has a 1.4 MMBtu/hr boiler for heating purposes at their concrete plant. The regulated pollutants emitted from the boiler are particulate matter (PM), particulate matter with a diameter smaller than ten microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC).

Due to the size of the boiler and the relatively low emissions expected, no add on pollution control equipment is required at this time. BPT requires the boiler to fire #2 fuel oil with a maximum fuel sulfur content of 0.5% by weight. Visible emissions from the boiler shall not exceed an opacity of 20 percent on a six (6) minute block average basis.

Boiler #1 Emissions and Fuel Use Caps

Based on the maximum amount of #2 fuel oil that can possibly be combusted in this unit running 24 hours/day and 365 days/year (87,600 gallons/year), with a sulfur content not to exceed 0.5% by weight, total allowable emissions for the boiler are as follows:

<u>Pollutant</u>	<u>Lb/hr</u>	<u>TPY</u>
PM	0.16	0.7
PM ₁₀	0.16	0.7
SO ₂	0.48	2.1
NO _x	0.67	2.9
CO	0.05	0.2
VOC	0.01	0.1

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, and
- will not violate applicable ambient air quality standards, or increment standards either alone or in conjunction with emissions from other sources.

Therefore the Department grants this minor revision A-294-71-J-M, subject to the conditions found in air emission license A-294-71-I-R, and in addition to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

- (1) Vaughn Thibodeau & Sons may operate boiler with a maximum design heat input capacity of 1.4 MMBtu/hr. The boiler shall fire #2 fuel oil with a maximum sulfur content not to exceed 0.5% by weight.

(2) Boiler #1

- a. Visible emissions from the boiler shall not exceed 20% opacity on a 6-minute block average.
- b. Fuel use records and receipts showing sulfur content for Boiler #1 shall be maintained for at least six years and made available to the Department upon request.
- c. Emissions from Boiler #1 shall be limited to the following:

Boiler Emission Limits

<u>Equipment</u>		<u>PM</u>	<u>PM₁₀</u>	<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>	<u>VOC</u>
Boiler 1	lb/hour	0.16	0.16	0.48	0.67	0.05	0.01

- (3) This amendment shall be reviewed for renewal concurrent with air emission license A-294-71-I-R.

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2005.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 3, 2005

Date of application acceptance: June 15, 2005

Date filed with Board of Environmental Protection: _____

This order prepared by Edwin L. Cousins, BAQ