

Wells-Ogunquit Community School District)	Departmental
York County)	Findings of Fact and Order
Wells, Maine)	Air Emission License
A-826-71-B-A)	Amendment #1

After review of the air emissions license amendment 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

1. Wells-Ogunquit Community School District was issued Air Emission License A-826-71-A-N on April 9th, 2002 permitting the operation of emission sources associated with their Wells, Maine educational facility.
2. Wells-Ogunquit Community School District has requested an amendment of their air emissions license to reflect the removal of the two Junior High boilers, each rated at 2.289 MMBtu/hr and the Ward Gym boiler rated at 2.700 MMBtu/hr. These boilers will be replaced with two H.B. Smith boilers, each rated at 4.48 MMBtu/hr.

B. Emission Equipment

Wells-Ogunquit Community School District is applying to include the operation of the following equipment to its air emissions license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Junior High Boiler #1	4.48	32.0	#2 fuel oil, 0.35%	1A
Junior High Boiler #2	4.48	32.0	#2 fuel oil, 0.35%	1A

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. This modification is determined to be a minor modification 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 Bureau of Air Quality regulations. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Emissions Units

Air Emission License A-826-71-A-N permits Wells-Ogunquit Community School District to operate seven #2 fuel oil fired boilers primarily for facility heat and hot water.

Ward Gym Boiler is a Crane boiler, installed in 1962 and rated at 2.70 MMBtu/hr. Junior High 1&2 are HB Smith boilers, installed in 1987 and rated at 2.289 MMBtu/hr each.

High School 1&2 are HB Smith boilers, installed in 1975 and rated at 5.194 MMBtu/hr each.

Elem. School 1&2 are H.B. Smith boiler, installed in 2002 and rated at 3.71 MMBtu/hr each.

Wells-Ogunquit Community School District will remove the Ward Gym and Junior High boilers and will be replacing them with two H.B. Smith boilers rated at 4.48 MMBtu/hr each. These boilers will be designated Junior High 1&2.

A summary of the BACT analysis for the two new Boilers is as follows:

1. PM and PM₁₀ limits are derived from Chapter 103, however BACT is stricter. BACT shall be 0.08 lb/MMBtu for PM and PM₁₀.

2. SO₂ emissions are derived from a mass balance on the use of #2 fuel oil with a sulfur content of 0.35%.
3. NO_x, CO, VOC emissions rates are based on AP-42, section 1.3, for Commercial boilers.
4. Visible emissions limits are based on performance data from similar #2 fuel oil fired boilers of this size and age:

Visible emissions from each boiler stack shall not exceed 20% opacity on a six-minute block average.

C. Annual Emission Restrictions

Wells-Ogunquit Community School District shall be restricted to the following annual emissions:

- Total annual facility fuel use shall be limited to 700,000 gallons of #2 fuel oil with a sulfur content not to exceed 0.35% by weight, based on a 12 month rolling total.
- This modification does not include a fuel cap adjustment, therefore no change in potential annual emissions will occur.

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

<u>Pollutant</u>	<u>Tons/Year</u>
PM	3.9
PM ₁₀	3.9
SO ₂	17.2
NO _x	9.8
CO	1.8
VOC	0.1

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a non major source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. An air quality analysis is not required for this amendment.

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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 Amendment A-826-71-B-A subject to the conditions found in Air Emission License A-826-71-A-N and in the following conditions:

The following condition shall replace condition (16) in Air Emission License A-826-71-A-N:

(16) Boilers

A. Total facility fuel use shall not exceed 700,000 gals/yr. of #2 fuel oil with a sulfur content not to exceed 0.35% sulfur by weight based on a 12-month rolling total. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the sulfur content of the fuel. Fuel use records shall be maintained on a monthly basis, in addition to the 12-month rolling total.

B. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Junior High 1	lb/hr	0.36	0.36	1.57	0.90	0.160	0.011
Junior High 2	lb/hr	0.36	0.36	1.57	0.90	0.160	0.011
High School 1	lb/hr	0.42	0.42	1.82	1.04	0.186	0.013
High School 2	lb/hr	0.42	0.42	1.82	1.04	0.186	0.013
Elem. School 1	lb/hr	0.30	0.30	1.30	0.74	0.133	0.009
Elem. School 2	lb/hr	0.30	0.30	1.30	0.74	0.133	0.009

C. Junior High 1 &2 shall not exceed 0.08 lbs/MMBtu for PM.

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D. Visible Emissions

Visible emissions from each boiler stack shall not exceed 20% opacity on a six-minute block average.

The following are new conditions to Air Emissions License A-826-71-A-N

- (22) Wells-Ogunquit Community School District shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).
- (23) This amendment shall expire concurrently with Air Emission License A-826-71-A-N.

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/22/2003

Date of application acceptance: 2/5/2003

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Jonathan Voisine, Bureau of Air Quality