



DEPARTMENT ORDER

**Winslow Public Schools
 Kennebec County
 Winslow, Maine
 A-938-71-E-R**

**Departmental
 Findings of Fact and Order
 Air Emission License
 Renewal**

FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Winslow Public Schools has applied to renew its Air Emission License for the operation of emission sources associated with the school system.

The equipment addressed in this license is located at Winslow Elementary School, Winslow Junior High School, and Winslow High School, and the central office is located at 25 Messalonskee Avenue, Winslow, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
WES #1 Winslow Elementary School	2.37	16.9	Distillate Fuel, 0.5% by weight	1992	1992	1
WES #2 Winslow Elementary School	2.37	16.9	Distillate Fuel, 0.5% by weight	1992	1992	2
WJH #1 Winslow Junior High School	2.76	19.7	Distillate Fuel, 0.5% by weight	1928	1928	3
WJH #2 Winslow Junior High School	3.99	28.5	Distillate Fuel, 0.5% by weight	2006	2006	4
WHS #1 Winslow High School	3.57	25.5	Distillate Fuel, 0.5% by weight	2007	2007	5
WHS #2 Winslow High School	3.57	25.5	Distillate Fuel, 0.5% by weight	2007	2007	6

C. Definitions

Distillate Fuel. For the purposes of this license, *distillate fuel* means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for Winslow Public Schools does not include the licensing the installation of new or modified equipment and the only changes in emission limits are a result of adjusting emission factors to be consistent with boiler classifications. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

The facility is licensed below the major source thresholds for criteria air pollutants (CAP) and hazardous air pollutants (HAP) and does not have the potential to emit above those levels. Winslow Public Schools is therefore considered a natural minor source of CAP and an area source of HAP.

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 *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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. Elementary School Boilers

Winslow Public Schools operates WES #1 and #2 at the elementary school for heat and hot water. Both boilers are rated at 2.37 MMBtu/hr and fire distillate fuel. The boilers were installed in 1992, and they exhaust through separate stacks.

1. BPT Findings

The BPT emission limits for the boilers are based on the following:

Distillate Fuel

PM/PM ₁₀	0.08 lb/MMBtu 06-096 C.M.R. ch. 115, BPT
SO ₂	0.5 lb/MMBtu based on the combustion of distillate fuel with a maximum sulfur content of 0.5% sulfur by weight
NO _x	20 lb/1000 gal from AP-42 Table 1.3-1, dated 05/10
CO	5 lb/1000 gal from AP-42 Table 1.3-1, dated 05/10
VOC	0.34 lb/1000 gal from AP-42 Table 1.3-3, dated 05/10
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the boilers are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WES #1 distillate fuel	0.19	0.19	1.19	0.34	0.09	0.01
WES #2 distillate fuel	0.19	0.19	1.19	0.34	0.09	0.01

Visible Emissions

Visible emissions from the each of the boilers shall not exceed 20% opacity on a six-minute block average basis.

Federal Rule Applicability

- a. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the sizes of the boilers, they are both not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

- b. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

WES #1 and #2 are both subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. The units are considered existing oil boilers rated less than 10 MMBtu/hr. [40 C.F.R. §§63.11193 and 63.11195]

Requirements for this subpart are detailed in the “Boiler NESHAP Requirements” section of this license.

C. Junior High School Boilers

Winslow Public Schools operates WJH #1 and #2 at the junior high school for heat and hot water. WJH #1 is a Smith boiler, manufactured in 1928, and is rated at 2.76 MMBtu/hr, firing distillate fuel. WJH #2 is a Weil-McLain boiler, manufactured in 2006, and is rated at 3.99 MMBtu/hr, firing distillate fuel.

WJH #1 acts as the primary boiler for all heat and hot water demands at the Junior High School. Winslow Public Schools anticipates that WJH #2 will operate only when WJH #1 malfunctions or fails completely. Each boiler exhausts through its own stack.

1. BPT Findings

The BPT emission limits for the boilers are based on the following:

Distillate Fuel

PM/PM ₁₀	0.08 lb/MMBtu 06-096 C.M.R. ch. 115, BPT
SO ₂	0.5 lb/MMBtu based on the combustion of distillate fuel with a maximum sulfur content of 0.5% sulfur by weight
NO _x	20 lb/1000 gal from AP-42 Table 1.3-1, dated 05/10

CO	5 lb/1000 gal from AP-42 Table 1.3-1, dated 05/10
VOC	0.34 lb/1000 gal from AP-42 Table 1.3-3, dated 05/10
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the boilers are the following:

Unit	Pollutant	lb/MMBtu
WJH #2 distillate fuel	PM	0.08

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WJH #1 distillate fuel	0.22	0.22	1.38	0.39	0.10	0.01
WJH #2 distillate fuel	0.32	0.32	2.00	0.57	0.14	0.01

Visible Emissions

Visible emissions from each of the boilers shall not exceed 20% opacity on a six-minute block average basis.

Federal Rule Applicability

- a. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the sizes of the boilers, they are both not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

- b. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

WJH #1 and #2 are both subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. The units are considered existing oil boilers rated less than 10 MMBtu/hr. [40 C.F.R. §§63.11193 and 63.11195]

Requirements for this subpart are detailed in the “Boiler NESHAP Requirements” section of this license.

D. High School Boilers

Winslow Public Schools operates WHS #1 and #2 at the high school for heat and hot water. Both boilers are rated at 3.57 MMBtu/hr and fire distillate fuel. The boilers were installed in 2007, and they each exhaust through a separate stack.

1. BPT Findings

The BPT emission limits for the boilers are based on the following:

Distillate Fuel

PM/PM ₁₀	0.08 lb/MMBtu 06-096 C.M.R. ch. 115, BPT
SO ₂	0.5 lb/MMBtu based on the combustion of distillate fuel with a maximum sulfur content of 0.5% sulfur by weight
NO _x	20 lb/1000 gal from AP-42 Table 1.3-1, dated 05/10
CO	5 lb/1000 gal from AP-42 Table 1.3-1, dated 05/10
VOC	0.34 lb/1000 gal from AP-42 Table 1.3-3, dated 05/10
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the boilers are the following:

Unit	Pollutant	lb/MMBtu
WHS #1 distillate fuel	PM	0.08
WHS #2 distillate fuel	PM	0.08

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WHS #1 distillate fuel	0.29	0.29	1.79	0.51	0.13	0.01
WHS #2 distillate fuel	0.29	0.29	1.79	0.51	0.13	0.01

Visible Emissions

Visible emissions from each of the boilers shall not exceed 20% opacity on a six-minute block average basis.

Federal Rule Applicability

- a. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the sizes of the boilers, they are both not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

- b. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

WHS #1 and #2 are both subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. The units are considered existing oil boilers rated less than 10 MMBtu/hr. [40 C.F.R. §§63.11193 and 63.11195]

Requirements for this subpart are detailed in the “Boiler NESHAP Requirements” section of this license.

E. Boiler NESHAP Requirements

National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

All of the boilers included in this license are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. The units are considered existing oil boilers rated lower than 10 MMBtu/hr. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements is listed below. At this time, the Department has not taken delegation of this federal rule promulgated by EPA; however, Winslow Public Schools is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

1. Compliance Dates, Notifications, and Work Practice Requirements

a. Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014.
[40 C.F.R. § 63.11225(a)(2)]

Winslow Public Schools submitted its Initial Notification to EPA on September 15, 2011.

b. Boiler Tune-Up Program

(1) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(2) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. Because each boiler is considered to be an existing oil-fired boiler rated lower than 5 MMBtu/hr, each is required to be tuned up every five years.
[40 C.F.R. § 63.11223(a) and Table 2]

(3) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

(a) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour.
[40 C.F.R. § 63.11223(b)(1)]

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(3)]

(d) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]

(e) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]

(f) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.

[40 C.F.R. § 63.11223(b)(7)]

(4) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:

(a) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;

(b) A description of any corrective actions taken as part of the tune-up of the boiler; and

(c) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

(5) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

Winslow Public Schools submitted its Notification of Compliance Status to EPA on September 22, 2011.

c. Compliance Report

A compliance report shall be prepared by March 1st every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

(1) Company name and address;

(2) A statement of whether the source has complied with all the relevant requirements of this Subpart;

(3) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

(4) The following certifications, as applicable:

- (a) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
- (b) "No secondary materials that are solid waste were combusted in any affected unit."
- (c) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

2. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- a. Copies of notifications and reports with supporting compliance documentation;
- b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

F. Fuel Use for All Boilers

Winslow Public Schools shall be limited to 300,000 gallons of distillate fuel on a calendar year total basis.

The boilers are all licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in the boilers shall not exceed 0.0015% by weight (15 ppm).

G. Annual Emissions

1. Total Annual Emissions

Winslow Public Schools shall be restricted to the following annual emissions on a calendar year total basis. The tons per year limits were calculated based on the firing of 300,000 gallons of distillate fuel in the boilers:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

Pollutant	Total TPY
PM	1.7
PM₁₀	1.7
SO₂	10.5
NO_x	3.0
CO	0.8
VOC	0.1

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this 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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-938-71-E-R subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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.

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 (38 M.R.S. § 347-C).

- (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. [06-096 C.M.R. ch. 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. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (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 a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

- A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. 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
 2. 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 C.F.R. 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.
[06-096 C.M.R. ch. 115]
- (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:
- 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 C.F.R. 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.
[06-096 C.M.R. ch. 115]

- (13) Notwithstanding any other provisions 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. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (15) Upon written request from 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 a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(16) **Elementary School Boilers**

A. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WES #1 distillate fuel	0.19	0.19	1.19	0.34	0.09	0.01
WES #2 distillate fuel	0.19	0.19	1.19	0.34	0.09	0.01

B. Visible emissions from each of the boilers shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(17) **Junior High School Boilers**

A. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
WJH #2 distillate fuel	PM	0.08	06-096 C.M.R. ch. 115, BPT

B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WJH #1 distillate fuel	0.22	0.22	1.38	0.39	0.10	0.01
WJH #2 distillate fuel	0.32	0.32	2.00	0.57	0.14	0.01

C. Visible emissions from each of the boilers shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(18) **High School Boilers**

D. Emissions shall not exceed the following:

Emission Unit	Pollutant	Ib/MMBtu	Origin and Authority
WHS #1 distillate fuel	PM	0.08	06-096 C.M.R. ch. 115, BPT
WHS #2 distillate fuel	PM	0.08	06-096 C.M.R. ch. 115, BPT

E. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WHS #1 distillate fuel	0.29	0.29	1.79	0.51	0.13	0.01
WHS #2 distillate fuel	0.29	0.29	1.79	0.51	0.13	0.01

F. Visible emissions from each of the boilers shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(19) **Boiler MACT Requirements**

Winslow Public Schools shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to the boilers including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

A. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. Because the boilers are all existing

oil-fired boilers rated lower than 5 MMBtu/hr, they are required to be tuned up every five years. [40 C.F.R. § 63.11223(a) and Table 2]

2. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
 - a. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(1)]
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(3)]
 - d. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
 - e. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
 - f. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]
3. Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
 - a. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before and after** the boiler tune-up;

- b. A description of any corrective actions taken as part of the tune-up of the boiler; and
- c. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

B. Compliance Report

A compliance report shall be prepared by March 1st every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

1. Company name and address;
2. A statement of whether the source has complied with all the relevant requirements of this Subpart;
3. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
4. The following certifications, as applicable:
 - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (2) "No secondary materials that are solid waste were combusted in any affected unit."
 - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

C. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

1. Copies of notifications and reports with supporting compliance documentation;
2. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
3. Records of the occurrence and duration of each malfunction of each applicable boiler; and
4. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

(20) Fuel Use for All Boilers

- A. Total fuel use for the licensed boilers shall not exceed 300,000 gal/yr of distillate fuel on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
- B. Prior to July 1, 2018, Winslow Public Schools shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
- C. Beginning July 1, 2018, Winslow Public Schools shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
- D. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]

Winslow Public Schools
Kennebec County
Winslow, Maine
A-938-71-E-R

20

Departmental
Findings of Fact and Order
Air Emission License
Renewal

- (21) Winslow Public Schools 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 (38 M.R.S. § 605).

DONE AND DATED IN AUGUSTA, MAINE THIS 24 DAY OF July, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Maec Allen Robert Case for
PAUL MERCER, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 01/09/2017

Date of application acceptance: 01/10/2017

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

