



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

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**Cooper Wiring Devices, Inc
Cumberland County
Brunswick, Maine
A-672-71-G-R**

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

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., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Cooper Wiring Devices, Inc. (CWD) has applied to renew their Air Emission License permitting the operation of emission sources associated with their wiring device manufacturing facility. The renewal removes the injection/compression molding process equipment, a mold cleaner and several parts washers inventoried in the previous license. Only boilers are to be included in the license.

The equipment addressed in this license is located at 1 Cressey Road in Brunswick, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type*	Stack #
Boiler #1	9.3	66.4	#2 oil	3
Boiler #2	5.8	44.1	#2 oil	4

* meets ASTM D396 standards

C. Application Classification

The application for CWD does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only and has been

processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

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 CMR 100 (as amended). 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.

Process Description

B. Boilers #1 & #2

CWD operates Boilers #1 and #2 for facility heating and hot water needs.

Boilers #1 and #2 were manufactured in 1985 and 1961, respectively, with maximum design capacities of 9.3 and 5.8 MMBtu/hr, respectively. Boilers #1 and #2 both fire ASTM D396 complaint #2 fuel oil and vent through stacks #3 and #4, respectively, each stack having a height of 30 feet AGL.

Because Boilers #1 and #2 each have a maximum heat input of less than 10 MMBTU/hr, they are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*.

1. BPT Findings

In order to facilitate recordkeeping and to be consistent with similar units at other facilities, CWD shall fire ASTM D396 compliant #2 fuel oil in both boilers.

The BPT emission limits for the boilers were based upon the following:

PM/PM₁₀ 0.2 lb/MMBtu, 06-096 CMR 103
 SO₂ 0.5 lb/MMBtu, based on ASTM D396 compliant #2 fuel oil
 NO_x 0.3 lb/MMBtu, BACT from previous license
 CO 5.0 lbs/1000 gallons, AP-42, Table 1.3-1, dated 5/10
 VOC 0.34 lbs/1000 gallons, AP-42, Table 1.3-3, dated 5/10
 Opacity Visible emissions from Stacks #3 and #4 (serving Boilers #1 and #2, respectively) each shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block averages in a continuous three-hour period.

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)
Boiler #1 – 9.3 MMBTU/hr - #2 fuel	1.86	1.86	4.65	2.79	0.33	0.02
Boiler #2 – 5.8 MMBTU/hr - #2 fuel	1.16	1.16	2.90	1.74	0.21	0.01

Until December 31, 2015, Boilers #1 and #2 shall fire ASTM D396 compliant #2 fuel oil. Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, all boilers shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, all boilers shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

The total facility-wide fuel use for CWD shall not exceed 200,000 gallons/year of ASTM D396 compliant #2 fuel oil, with a maximum sulfur content not to exceed 0.5% by weight, on a twelve-month rolling total basis.

Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and twelve-month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

2. 40 CFR Part 63 Subpart JJJJJ

Boilers #1 and #2 are considered to be existing oil-fired boilers each rated less than 10 MMBtu/hr; therefore, they are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ).

For informational purposes, a summary of the current applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule

promulgated by EPA, however CWD 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>

- a. For Boilers #1 and #2, an Initial Notification submittal to EPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]
- b. A boiler tune-up program shall be implemented to include the tune-up of the applicable boilers by March 21, 2012. [40 CFR Part 63.11196(a)(1)]
- c. A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4)] The Notification of Compliance Status form developed by EPA may be used to submit the required information. This notice can be found near the bottom of the page on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.
- d. After the initial tune-up and initial compliance report has been submitted, the facility shall implement a biennial boiler tune-up program and submit biennial compliance reports. The following are requirements of the boiler tune-up program:
 - i. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40 CFR Part 63.11223(a)]
 - ii. Each biennial tune-up shall include the following, as applicable:
 - (a) Inspection of the burner, cleaning/replacing any component of the burner, as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months. [40 CFR Part 63.11223(b)(1)]
 - (b) Inspection of the flame pattern, and adjustment of the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
 - (c) Inspection of the system controlling the air-to-fuel ratio, to ensure proper calibration and that it is functioning properly. [40 CFR Part 63.11223(b)(3)]
 - (d) Optimization of total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
 - (e) Measurement of concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]
 - iii. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)]

- e. Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of compliance reports; 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; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation.

C. Annual Emission Restrictions

CWD shall be restricted to the following annual emissions, on a twelve-month rolling total basis:

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

Unit	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #1 & #2	1.7	1.7	7.1	4.2	0.3	0.1
Total TPY	1.7	1.7	7.1	4.2	0.3	0.1

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances affecting local air quality:

Pollutant	Tons/Year
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the total facility licensed emissions, CWD is below the emissions level required for modeling.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive BPT,
- 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-672-71-G-R subject 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.

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.A. §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 CMR 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 CMR 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 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
 - (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 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 CMR 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 CMR 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 CMR 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 CMR 115]
 - (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:
 - 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 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.
[06-096 CMR 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 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.
[06-096 CMR 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 CMR 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 emission 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 CMR 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 CMR 115]

SPECIFIC CONDITIONS

(16) Boilers #1 & #2

A. Fuel

1. The total facility-wide fuel use for CWD shall not exceed 200,000 gallons/year of ASTM D396 compliant #2 fuel oil, with a maximum sulfur content not-to-exceed 0.5% by weight, on a twelve-month rolling total basis.
2. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
3. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and twelve-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions from Boilers #1 and #2 shall not exceed the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 – 9.3 MMBTU/hr - #2 fuel	1.86	1.86	4.65	2.79	0.33	0.02
Boiler #2 – 5.8 MMBTU/hr - #2 fuel	1.16	1.16	2.90	1.74	0.21	0.01

- C. Visible emissions from Stacks #3 and #4 shall each not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 101]

- (17) Visible emissions from any general process source shall not exceed an opacity of 20% on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 CMR 101]

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A-672-71-G-R

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- (18) CWD 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.A. §605].

DONE AND DATED IN AUGUSTA, MAINE THIS 10th DAY OF November, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Patricia W. Aho*
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 17, 2011

Date of application acceptance: October 24, 2011

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J. Ostrowski, Bureau of Air Quality.

