



Form No.	A-L-0006
Effective Date	12/2005
Revision No.	09
Last Revision Date	10/23/14
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CHAPTER 115 AIR EMISSION LICENSE APPLICATION FORM

State of Maine
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017
Phone: (207) 287-2437 Fax: (207) 287-7641

Section A: FACILITY INFORMATION

Owner or Operator (*Legal name as registered with the Secretary of State*):
University of Maine System

Facility Site Name: USM-Portland

Facility Site Address (*Physical, no post office boxes*): 25 Bedford Street

City/Town: Portland, ME Zip Code: 04104 County: Cumberland

Facility Description: University of Southern Maine Portland Campus

Application Description:

Amendment #4 involves replacement of boilers #1, #2 and #3 with new boilers fired primarily on natural gas with #2 oil as a backup fuel. Removal of stack #1 and replacement with three individual stacks #1a, 1b & 1c. Elimination of #6 oil as a fuel source and removal of existing above-ground #6 oil tank. Installation of new above-ground #2 oil storage tank. Adding a new Back-up Generator #7 that consumes diesel fuel with 0.05% or less sulfur content.

Current License #: A- 464 - 71 - P - M

Check When Done:

All Sources

<input checked="" type="checkbox"/>	Application Completed
<input checked="" type="checkbox"/>	Copy Sent to Town (date sent: 08/18/15)
<input checked="" type="checkbox"/>	Public Notice Published paper name & date: Portland Press Herald, 08/12/15
<input checked="" type="checkbox"/>	Enclosed Public Notice Tear Sheet
<input checked="" type="checkbox"/>	Signed Signatory Form (Section J)

Additional Requirements for New Sources

<input type="checkbox"/>	Schedule for construction or installation of equipment
<input type="checkbox"/>	Title, Right, or Interest (e.g. copy of deed or lease)
<input type="checkbox"/>	Check for Fee

Additional Requirements for New Major Sources and Major Modifications

<input type="checkbox"/>	Notify Abutting Landowners
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For Department Use

Application #: A- _____ - _____ - _____ - _____

App Track #: _____

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Facility Contact:

Name: Adam Thibodeau Title: Interim Executive Director of Facilities Mgmt
Company: Facilities Management, University of Southern Maine
Mailing Address: P.O. Box 9300

City/Town: Portland State: ME Zip Code: 04104-9300
Phone: (207) 780-4751 Fax: (207) 780-4538
e-mail: adam.l.thibodeau@maine.edu

Application Contact:

Name: Jeff LaPierre, PE, LEED AP Title: Senior Mechanical Engineer
Company: Harriman Associates
Mailing Address: 46 Harriman Drive

City/Town: Auburn State: ME Zip Code: 04210
Phone: (207) 784-5100 Fax: (207) 782-3017
e-mail: jlapierre@harriman.com

Billing Contact:

Name: Paul Kuplinski Title: Director of Finance and Administration
Company: Facilities Management, University of Southern Maine
Mailing Address: P.O. Box 9300

City/Town: Portland State: ME Zip Code: 04104-9300
Phone: (207) 780-4751 Fax: (207) 780-4538
e-mail: pkuplinski@usm.maine.edu

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Control Equipment for Fuel Burning Equipment

If applicable, indicate the types of required/operated add-on pollution control equipment, including baghouses, cyclones/multiclones, SCR, SNCR, etc.

Emission Unit	Type of Control	Pollutant Controlled	Control Efficiency
<i>Boiler #1 (Example)</i>	<i>Cyclone (Example)</i>	<i>PM (Example)</i>	<i>90% (Example)</i>

Monitors for Fuel Burning Equipment:

If applicable, indicate types of required/operated monitors, including Continuous Emission Monitors (CEM), Continuous Opacity Monitors (COM), parameter monitors for operational purposes, etc.

Emission Unit	Type of Monitor	Data Measured
<i>Boiler #1 (Example)</i>	<i>CEM (Example)</i>	<i>NO_x (Example)</i>
<i>Boiler #1 (Example)</i>	<i>Parameter – operational (Example)</i>	<i>Temperature (Example)</i>

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Section C: INCINERATORS

	Incinerator Unit 1	Incinerator Unit 2
Incinerator Type (medical waste, municipal, etc.)		
Waste Type		
Make (Shenandoah, Crawford, etc.)		
Model Number		
Date of Manufacture		
Date of Installation		
Number of Chambers		
Max. Initial Charge	lb	lb
Max. Design Combustion Rate	lb/hr	lb/hr
Heat Recovery? (Yes or No)		
Retention Time of Exhaust Gases	seconds	seconds
Automatic Feeder? (Yes or No)		
Temperature Range Primary	to °F	to °F
Secondary	to °F	to °F
Auxiliary Burner - Primary Chamber max. rating (MMBtu/hr)		
type of fuel used		
Auxiliary Burner - Secondary Chamber max. rating (MMBtu/hr)		
type of fuel used		
Annual Waste Combusted for ____ (yr)		
Pollution Control Equipment (if any)		
Stack Number		
Monitors (ie - temperature recorder)		

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PROCESS EQUIPMENT (section D cont'd)

Chemical Usage

Note: Complete this section for any chemicals integral to your process, for example, a cementing process for outsoles, dyes, surface coating, printing, cleaning, etc. Attach additional pages or MSDS sheets as needed.

Process	Chemical substance used in process	Actual Usage (gal or lb for yr _____)	Hazardous chemical(s) in substance	Percent VOC ¹ (%)	Percent HAP ² (%)	Total VOC emitted (lb/year)	Total HAP emitted (lb/year)

¹ Volatile Organic Compounds

² Hazardous Air Pollutants

Describe method of record keeping (ie. monthly calculations from purchase records, flow monitors on solvent tanks, etc.)

Describe methods used to calculate VOC/HAP emitted (ie – test results, if control equipment was taken into account; if conditions exist where solvents remain in the substrate rather than complete volatilization, etc.)

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Section E: STACK DATA

Stack #	Height Above Ground (ft)	Inside Diameter (ft)	Exit Temperature °F	Exhaust Flow Rate (ft ³ /s) [indicate actual or standard]
1a	41.2	2	400 deg. F average	5.91 ft ³ /s actual at max output
1b	40.4	2	400 deg. F average	5.91 ft ³ /s actual at max output
1c	40.1	1.33	400 deg. F average	1.77 ft ³ /s actual at max output

Section F: ANNUAL FACILITY FUEL USE

Total Fuel Consumption by Month for: 2014 (year)

Fuel type: Natural Gas

Fuel type: #2 Fuel Oil

Fuel type: _____

Avg % sulfur (oil) _____

Avg % sulfur (oil) 0.35

Avg % sulfur (oil) _____

Avg % moisture (wood) _____

Avg % moisture (wood) _____

Avg % moisture (wood) _____

(circle one: gal, tons, scf)

(circle one: gal, tons, scf)

(circle one: gal, tons, scf)

January 75910 CCF

54690 gal

February 60150 CCF

43336 gal

March 64790 CCF

46679 gal

April 40930 CCF

29488 gal

May 6450 CCF

4647 gal

June 931 CCF

671 gal

July 0 CCF

0 gal

August 60 CCF

43 gal

September 4450 CCF

3206 gal

October 27420 CCF

19755 gal

November 51590 CCF

37169 gal

December 65510 CCF

47197 gal

Total 398191 CCF

286881 gal

Proposed Annual Limit 525000 CCF

375000 gal

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Section G: LIQUID ORGANIC MATERIAL STORAGE

Tank #						
Capacity (gallons)	15000					
Materials Stored	#2 oil					
Reid Vapor Pressure (RVP)	<0.2					
Annual Throughput						
Above or Below Ground?	Above					
Tank Type (floating or fixed, riveted or bolted, etc.)	Fixed					
Physical Description – year installed	2015					
Physical Description – color	Gray					
Dimensions - height (ft)	18.1					
Dimensions - Diameter (ft)	12					
Construction Material	Carbon steel					
Control Device						

Section H: MISCELLANEOUS

Note: Use this section to describe any equipment, activities, or other air emission sources that did not fit in any of the above categories. Include descriptions of the associated emissions. Attach additional pages if necessary.

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Section I: BPT/BACT AND OTHER ATTACHMENTS

BPT/BACT Analysis:

For a license renewal for existing equipment, the applicant is required to submit a Best Practical Treatment (BPT) analysis to the Department. A BPT analysis establishes what equipment or requirements are appropriate for control or reduction of emissions of regulated pollutants to the lowest possible level considering the existing state of technology, the effectiveness of available alternatives, and the economic feasibility.

For a new license or the addition of new equipment to an existing license, the applicant is required to submit a Best Available Control Technology (BACT) analysis. A BACT analysis is a top-down approach to selecting air emission controls. It is done on a case-by-case basis and develops emission limits based on the maximum degree of reduction for each pollutant emitted taking into account economic, environmental and energy impacts.

- I certify that, to the best of my knowledge, the control equipment, fuel limitations, and process constraints outlined in this application represent BPT / BACT for the equipment and processes listed.

OR

- I have attached a separate BPT / BACT analysis to this application.

Other Attachments:

Please list any other attachments included with this application.

Burner #1_#2 Submittal Data
Burner #3 Submittal Data
Boiler #1_#2 Submittal Data
Boiler #3 Submittal Data
Air Emission License Narrative
Emissions Calculations Spreadsheet
Generator Certificate of Conformity with the Clean Air Act of 1990

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Section J: APPLICABLE RULES

Please indicate any rules you believe may be applicable to your facility by checking the associated box.

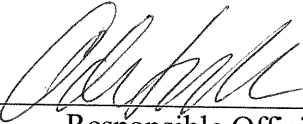
Citation	Title
06-096 CMR 101	Visible Emissions
06-096 CMR 103	Fuel Burning Equipment Particulate Emission Standard
06-096 CMR 104	Incinerator Particulate Emission Standard
06-096 CMR 105	General Process Source particulate Emission Standard
06-096 CMR 106	Low Sulfur Fuel Regulation
06-096 CMR 111	Petroleum Liquid Storage Vapor Control
06-096 CMR 112	Bulk Terminal Petroleum Liquid Transfer Requirements
06-096 CMR 117	Source Surveillance
06-096 CMR 118	Gasoline Dispensing Facilities Vapor Control
06-096 CMR 121	Emission Limitations and Emission Testing of Resource Recovery Facilities
06-096 CMR 123	Paper Coating Regulation
06-096 CMR 124	Total Reduced Sulfur Control from Kraft Mills
06-096 CMR 125	Perchloroethylene Dry Cleaner Regulation
06-096 CMR 126	Capture Efficiency Test Procedures
06-096 CMR 129	Surface Coating Facilities
06-096 CMR 130	Solvent Degreasers
06-096 CMR 131	Cutback Asphalt and Emulsified Asphalt
06-096 CMR 132	Graphic Arts – Rotogravure and Flexography
06-096 CMR 133	Petroleum Liquids Transfer Vapor Recovery at Bulk Gasoline Plants
06-096 CMR 134	Reasonably Available Control Technology for Facilities That Emit Volatile Organic Compounds
06-096 CMR 137	Emission Statements
06-096 CMR 138	Reasonably Available Control Technology for Facilities That Emit Nitrogen Oxides
06-096 CMR 140	Part 70 Air Emission License Regulations
06-096 CMR 145	NOx Control Program
06-096 CMR 153	Mobile Equipment Repair and Refinishing
06-096 CMR 159	Control of Volatile Organic Compounds from Adhesives and Sealants
06-096 CMR 161	Graphic Arts – Offset Lithography and Letterpress Printing
40 CFR Part 60	New Source Performance Standards (NSPS) (please list Subpart(s):)
40 CFR Part 63	National Emission Standards for Hazardous Air Pollutants (NESHAP) (please list Subpart(s):)
Other (list)	
Other (list)	

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Section K: SIGNATORY REQUIREMENT

Each application submitted to the Department must include the following certification signed by a Responsible Official*:

"I certify under penalty of law that, based on information and belief formed after reasonable inquiry, I believe the information included in the attached document is true, complete, and accurate."



Responsible Official Signature

8/18/15

Date

Adam Thibodeau

Responsible Official (Printed or Typed)

Interim Director of Facilities

Title Management

* A Responsible Official is defined by MEDEP Rule, Chapter 100 as:

- A. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (1) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (2) The delegation of authority to such representatives is approved in advance by the permitting authority;
- B. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- C. For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

against Robert C. Defendant, and In-Interest, for the of a mortgage is set forth above, ory ninety (90) of redemption xpired without notice is hereby there will be sold ale at **11:00 A.M. y, the 14th day umber, 2015, at fices of Perkins ,P.A., One Canal land, Maine,** all ar the premises n said mortgage, described above. rty is shown on rland Map as ap 13. Please mortgage deed n said Registry of ore particular o the premises, nclude an Old with 4 bedrooms, d 1,369 sq. ft. of e, situated on a t. There will be use. To confirm and place, call A. Williams, Esq., 74-2635. TERMS he property will e highest bidder ies with the terms eposit of at least must be paid State Housing 'MaineHousing') rder, bank check, U.S. funds, which e retained as a able, non-interest posit. The highest ust also sign a n sale contract 'Housing, calling ng within thirty e public sale, at e the balance n money order, ck, or certified payable to said ng, which will a duly executed deed without The sale shall be an "AS IS" basis, rranities of any subject to: (a) ion which a title ould reveal, (b) l City of Portland taxes or sewer ts, and (c) any n an inspection of the premises . Other terms will ced at the sale.

all customer contracts that authorize customer use of the CTI Software; and all additions, substitutions, acquisitions, accessions and replacements of and to the foregoing.

This Sale is conducted pursuant to 11 M.R.S. § 9-1610 by Cushing Systems, Inc., successor to Cushing Technologies, Inc. ("Seller") to foreclose on a security interest in the Collateral in light of a default by J2 of certain obligations.

Seller agrees to convey its interest in the Collateral by a Non-Recourse Assignment and Assumption Agreement to be delivered at closing, further subject to, without limitation: (a) any bankruptcy proceeding, (b) any terms and conditions amended or announced at the time of sale,

The Collateral will be sold "AS IS, WHERE IS, WITHOUT RECOURSE" to the highest bidder, who must submit at the Sale before bidding a deposit of Fifty Thousand Dollars (\$50,000.00) in cash, certified funds, or cashier's check payable to Murray, Plumb & Murray Escrow Account, which sum will be retained as a nonrefundable, non-interest-bearing down payment to be applied to the purchase price. Within five days of the Sale, the successful bidder must increase its non-refundable deposit to 10% of the bid amount. The highest bidder must also sign a purchase and sale contract with Seller calling for a closing within thirty (30) days of the Sale at which time the balance will be due in cash or certified funds payable to Seller.

Seller reserves the right in its sole discretion to reject or accept any bid for the Collateral; to hold periodic recesses in the sale process; to adjourn and continue the sale from time to time; and to amend the terms of sale as it may deem to be in its best interests.

Other terms are to be announced at the auction. For further information contact Kelly W. McDonald, Murray, Plumb & Murray, 75 Pearl Street, Portland, Maine or at (207) 773-5651, counsel for Seller.

Legal Advertisement

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that University of Southern Maine, Portland Campus intends to file an Air Emission License application with the Maine Department of Environmental Protection (DEP) pursuant to the provisions of 38 M.R.S.A., Section 590 on August 14, 2015. The application is for Air Emissions License Renewal at the University of Southern Maine, Portland Campus. According to Department regulations, interested parties must be publicly notified, written comments invited, and if

to assume jurisdiction must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation will be available for review at the Bureau of Air Quality (BAQ) DEP offices in Augusta, (207) 287-2437, during normal working hours. A copy of the application and supporting documentation will also be available at the municipal office in Portland, Maine.

Written public comments may be sent to DEP Project Manager, Eric Kennedy at the Bureau of Air Quality, State House Station #17, Augusta, Maine 04333.

Legal Advertisement

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that University of Southern Maine intends to file an Air Emission License application with the Maine Department of Environmental Protection (DEP) pursuant to the provisions of 38 M.R.S.A., Section 590 on August 19, 2015. The application is for an amendment to the existing license for the Central Heating Plant which includes the replacement of the three existing #6 and # 2 fuel fired steam boilers to three Natural gas & #2 fuel oil steam boilers at Durham Street, Portland Maine. According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation will be available for review at the Bureau of Air Quality (BAQ) DEP offices in Augusta,

(207) 287-2437, during normal working hours. A copy of the application and supporting documentation will also be available at the municipal office in Portland Maine.

Written public comments may be sent to DEP Project Manager Eric Kennedy at the Bureau of Air Quality, State House Station #17, Augusta, Maine 04333.

Legal Advertisement

STATE OF MAINE YORK, ss DISTRICT COURT LOCATION: BIDDEFORD DOCKET NO. BID-PC-14-029

LEGAL NOTICE TO: Stephen Niedojadlo and Unknown Father

Pursuant to an Order for Service by Publication dated 8/3/15,

NOTICE IS HEREBY GIVEN THAT:

1. Pursuant to 22 M.R.S.A. §§4035 and 4036 and M.R.S.A. § 4055, State of Maine Department of Health and Human Services ("Department") has filed a Petition for Child Protection Order and a Petition to Terminate Parental Rights ("Petitions") with regard to the minor child, **Haleigh Rowe, born May 16, 2014**.
2. Mother of the child is **Alexis M. Dennis**. The putative father of the child is named as **Stephen Niedojadlo or Unknown Father**.
3. Hearings on these Petitions as to the **putative father, Stephen Niedojadlo, and unknown father** of this child will be held at the **Biddeford District Court, 25 Adams Street, Biddeford, ME, 04005 on September 23, 2015, at 9:00 a.m. for the putative father and any unknown father** to appear and be heard.
4. **Right to Legal Counsel:** A parent in these proceedings is entitled to legal counsel. If the parent wants an attorney but is unable to afford one, the parent should contact the Court at 25 Adams St., Biddeford, ME, tel. no. **(207) 283-1147** to request appointed counsel.
5. If the parent fails to appear

at the hearings regarding this matter, the court will likely determine this to indicate intent to abandon the child pursuant to 22 M.R.S.A. §4002(1-A).

6. These proceedings have resulted in custody of the child being awarded to the Department and may result in the termination of your parental rights under 22 M.R.S.A. §§4051-4057 if you fail to appear in Court at the above date and time.

7. If you have questions regarding this matter, you may contact the Biddeford Department of Health and Human Services, Division of Child and Family Services, at (207) 286-2508.

8. In these proceedings, State of Maine Department of Health and Human Services is represented by the Office of the Attorney General, 415 Congress St., Portland, ME 04101.

Legal Advertisement

The Scarborough Town Council will conduct a public hearing and possible second

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reading on Wednesday, August 19, 2015, beginning at 7:00 p.m. at the Scarborough Municipal Building, located at 259 U.S. Route One, to receive public comments, both written and oral, on the proposed amendments to Chapter 405 of the Scarborough Zoning Ordinance the proposed Contract Zone from Avesta to establish a 50 unit affordable housing development at 577 U.S. Route One.

Yolande P. Justice
Town Clerk

Legal Advertisement

The Scarborough Town Council will conduct a public hearing on Wednesday, August 19, 2015, at 7:00 p.m. at the Municipal Building. The purpose of the public hearing will be to receive comments, both oral and written, on the new request for a Food Handlers License from The Oaks Group, LLC, d/b/a Sweet Frog Treats, located at 300 Gallery Road.

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Notice of MaineCare Reimbursement Methodology Change

AGENCY: Department of Health and Human Services, Office of MaineCare Services

AFFECTED SERVICES: Chapter 101, MaineCare Benefits Manual, Chapters III - Section 45: Hospital Services

NATURE OF PROPOSED CHANGES:

The Department of Health and Human Services (DHHS) will seek approval from the Centers for Medicare and Medicaid Services to reduce the payment for DHHS-defined, non-emergent use of the Emergency Department (ED) for in-state acute care Non-critical Access Hospitals only.

Specifically, the Evaluation and Management portion of the Ambulatory Payment Classification (APC) for ED services (99281-99285 billed with revenue codes 0450-0459) will be reimbursed at the current rate listed in the MaineCare fee schedule.

Non-emergent use of the ED will be identified by a primary diagnosis of the following ICD-9 codes (for services prior to October 1, 2015) or ICD-10 codes (for services delivered on or after October 1, 2015).

The Relevant ICD-09 codes are:

034.0; 079.99; 300.00; 300.02; 372.00; 372.30; 380.10; 381.01; 381.4; 382.00; 382.9; 461.9; 462; 465.9; 466.0; 473.9; 490; 493.00; 493.02; 493.10; 493.12; 493.20

493.22; 493.81; 493.82; 493.90; 493.92; 691.0; 691.8; 692.6

692.9; 719.40; 719.41; 719.42; 719.43; 719.44; 719.45; 719.46; 719.47; 719.48; 719.49; 724.2; 724.5; 729.1; 729.5; 780.79; 782.1; 784.0; 786.2

The relevant ICD 10 codes are:

J02.0; J03.00; J03.01; B97.10; B97.89; F41.9; F41.1; H10.30; H10.31; H10.32; H10.33; H10.9; H60.00; H60.01; H60.02; H60.03; H60.10; H60.11; H60.12; H60.13; H60.311; H60.312; H60.313; H60.319; H60.321; H60.322; H60.323; H60.329; H60.391; H60.392; H60.393; H60.399; H65.00; H65.01; H65.02; H65.03; H65.04; H65.05; H65.06; H65.07; H65.90; H65.91; H65.92; H65.93; H66.001; H66.002; H66.003; H66.004; H66.005; H66.006; H66.007; H66.009; H66.90; H66.91; H66.92; H66.93 ; J01.90; J01.91; J02.8; J02.9; J06.9; J20.0; J20.1; J20.2; J20.3; J20.4; J20.5; J20.6; J20.7; J20.8; J20.9; J32.9; J40; J45.20; J45.30; J45.40; J45.50; J45.21; J45.31; J45.41; J45.20.1; J45.30.1; J45.40.1; J45.50.1; J45.21.1; J45.31.1; J45.41.1; J45.51; J44.9; J44.1; J45.900; J45.991; J45.909; J45.998; J45.901; L22; L20.0; L20.81; L20.82; L20.84; L20.89; L20.9; L23.7; L24.7; L25.5; L23.9; L24.9; L25.9; L30.0; L30.2; L30.8; L30.9; M25.50; M25.511; M25.512; M25.519; M25.521; M25.522; M25.529; M25.531; M25.532; M25.539; M79.643; M79.646; M25.551; M25.552; M25.559; M25.561; M25.562; M25.569; M25.571; M25.572; M25.579; M25.50; M54.5; M54.89; M54.9; M60.80; M60.81; M60.811; M60.812; M60.819; M60.82; M60.821; M60.822; M60.829; M60.83; M60.831; M60.832; M60.839; M60.84; M60.841; M60.842; M60.849; M60.85; M60.851; M60.852; M60.859; M60.86; M60.861; M60.862; M60.863; M60.864; M60.865; M60.866; M60.867; M60.868; M60.869; M60.870; M60.871; M60.872; M60.873; M60.874; M60.875; M60.876; M60.877; M60.878; M60.879; M60.880; M60.881; M60.882; M60.883; M60.884; M60.885; M60.886; M60.887; M60.888; M60.889; M60.890; M60.891; M60.892; M60.893; M60.894; M60.895; M60.896; M60.897; M60.898; M60.899; M60.900; M60.901; M60.902; M60.903; M60.904; M60.905; M60.906; M60.907; M60.908; M60.909; M60.910; M60.911; M60.912; M60.913; M60.914; M60.915; M60.916; M60.917; M60.918; M60.919; M60.920; M60.921; M60.922; M60.923; M60.924; M60.925; M60.926; M60.927; M60.928; M60.929; M60.930; M60.931; M60.932; M60.933; M60.934; M60.935; M60.936; M60.937; M60.938; M60.939; M60.940; M60.941; M60.942; M60.943; M60.944; M60.945; M60.946; M60.947; M60.948; M60.949; M60.950; M60.951; M60.952; M60.953; M60.954; M60.955; M60.956; M60.957; M60.958; M60.959; M60.960; M60.961; M60.962; M60.963; M60.964; M60.965; M60.966; M60.967; M60.968; M60.969; M60.970; M60.971; M60.972; M60.973; M60.974; M60.975; M60.976; M60.977; M60.978; M60.979; M60.980; M60.981; M60.982; M60.983; M60.984; M60.985; M60.986; M60.987; M60.988; M60.989; M60.990; M60.991; M60.992; M60.993; M60.994; M60.995; M60.996; M60.997; M60.998; M60.999

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Notice of MaineCare Reimbursement Methodology Change

AGENCY: Department of Health and Human Services, Office of MaineCare Services

AFFECTED SERVICES: Chapter 101, MaineCare Benefits Manual, Chapter III, Section 67, Nursing Facility (NF) Services

NATURE OF PROPOSED CHANGES: The Department will update the State Plan to add reimbursement for Ventilator Care Services as a separately reimbursable service, above and beyond the Nursing Facility daily rate. Reimbursement for Ventilator Care Services in nursing facilities will be through a prior authorization process, based on the member's medical need.

This change will be effective August 31, 2015.

The Department will also request approval from the Centers for Medicare and Medicaid Services to include the cost of continuing education for direct care staff as a direct care component rather than a routine cost component.

Finally, the Department will request approval to increase nursing facilities' final prospective rates from 95.12 percent of all of the calculated direct care cost component and all of the routine cost component to 97.44 percent.

Advertisement

SALE

Please take notice that the collateral below (the "Sale") will be sold on August 24, 2015, at 11:00 a.m. at the Murray, Plumb & Murray, 75 Pearl Street, Portland, Maine.

The collateral to be sold ("Collateral") is owned by J2 Solutions, Inc., a company doing business as Agisent, Inc. ("J2") and is as follows: all CTI defined as certain PSIMS CAD, PSIMS Mobile (with or without PR), PSIMS Civil



BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS

A. Introduction

The minor revision to Air Emission License A-464-71-M-R for USM-Portland requires a Best Available Control Technology (BACT) analysis, as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended).

The scope of the minor revision includes replacing existing Boilers #1, #2 and #3 with new boilers #1, #2 and #3. From this point on in this license amendment, all references shall mean new Boilers #1, #2 and #3. Boilers #1, #2 and #3 are licensed to fire natural gas and No. 2 fuel oil. #4 and #6 fuel oil have been removed as a fuel source. Additionally, a new Generator #7 was added with a rating of 3.33 MMBtu/hour, equivalent to approximately 147 kW (200 hp), with a maximum firing rate of 23.8 gallons/hour of ultra-low sulfur diesel fuel (0.0015% sulfur by weight). The unit was manufactured and installed in 2015 and exhausts through its own integral stack.

The Top-down BACT consists of the following 5 step process:

- Step 1 – Identify all control technologies
- Step 2 – Eliminate technically infeasible options
- Step 3 – Rank remaining control technologies by control effectiveness
- Step 4 – Evaluate most cost effective controls and document results
- Step 5 – Select BACT

B. Step 1 – Identify All Control Technologies

1. Replacing #4 and #6 fuel oil with #2 fuel oil as a fuel source for boilers #1, #2 and #3. The “heavy oil” fuels contain relatively higher amounts of pollutants than more refined fuels, particularly sulfur which forms sulfur dioxide upon combustion.
2. Incorporating low NO_x burners on all three boilers #1, #2 and #3 to reduce emissions of nitrogen oxides.
3. Incorporating cyclone collectors to reduce particulate matter emissions.
4. Incorporating “wet scrubbers” to reduce fine particulate matter emissions.
5. For diesel generators, burn low sulfur fuel.
6. For diesel generators, fabricate to conform with the EPA Clean Air Act of 1990

C. Step 2 – Eliminate Technically infeasible Options

1. The incorporation of cyclone collectors applies particularly to fuels that produce a large amount of particulate matter upon combustion. For instance, biomass fuels are related to high emissions of particulate matter, especially fine particulate matter smaller than 10 microns which is regarded as a major indicator for the health relevance of ambient air pollution. For comparative purposes, the average particulate emissions for #2 fuel oil, #6 fuel



oil and biomass fuel are as follows:

- #2 Fuel Oil – 0.017 lb/MMBtu
- #6 Fuel Oil – 0.116 lb/MMBtu
- Biomass Fuel – 0.163 lb/MMBtu

Since the average particulate emissions for #2 fuel oil are an order of magnitude smaller than that of #6 fuel oil and biomass fuel, incorporation of a cyclone collector does not make economic sense based upon the environmental benefit that is achieved. As stated within Section E of the License Application Form, the exhaust flow rate for all three boilers adds up to 13.59 ft³/s which translates to 815.4 CFM. The following are comparative annualized costs for different types of cyclone collector technologies based upon a total plant exhaust flow rate of 815.4 CFM:

- Multicyclone - \$11,000
- Mechanically-Aided Separator - \$62,000

Additionally, it is not common practice to incorporate cyclone collector technologies into boiler plants that consume #2 fuel oil.

2. The incorporation of wet scrubbers also applies to fuels that produce large amounts of particulate matter; however their primary focus is on fine particulate matter smaller than 10 microns. As stated above, the particulate emissions from #2 fuel oil are small compared to #6 fuel oil and biomass fuel; therefore it does not make economic sense to incorporate a wet scrubber based upon the environmental benefit that is achieved. The following are comparative annualized costs for different types of wet scrubber technologies based upon a total plant exhaust flow rate of 815.4 CFM:

- Spray-Chamber/Spray-Tower Wet Scrubber - \$40,000
- Venturi Scrubber - \$157,000

In summary, due to the expected quantities of pollutants from this equipment, add-on control devices as described above are not economically justified. Additionally, add-on controls are typically not required for similar equipment licensed in Maine and other states.

D. Step 3 – Rank Remaining Control Technologies by Control Effectiveness

1. Replacing #4 and #6 fuel oil with #2 fuel oil will assist in reducing particulate matter, sulfur dioxide and nitrogen oxides. As noted on the calculation spreadsheet, there is a significant reduction in emissions between what the boilers would produce burning heavy oil verses burning #2 fuel oil.
2. Incorporation of low NO_x burners with flue gas recirculation (FGR) provides an additional reduction in the production of nitrous oxides as noted on the calculation spreadsheet.
3. The diesel generator is designed for and will burn low sulfur fuel. The expected emissions are



noted on the calculation spreadsheet.

4. The generator has been fabricated to conform with the EPA Clean Air Act of 1990, and the certificate of conformity has been included as backup documentation.
- E. Step 4 – Evaluate the Most Cost Effective Controls and Evaluate Results
1. All of the remaining control technologies are cost effective and feasible to incorporate into the BACT.
- F. Step 5 – Select BACT
1. Replace #4 and #6 fuel oil with #2 fuel oil for Boilers #1, #2 and #3.
 2. Incorporate low NOx burners with FGR to further reduce nitrous oxide emissions for Boilers #1, #2 and #3.
 3. Burn low sulfur diesel fuel in Generator #7.
 4. Fabricate Generator #7 to conform with the EPA Clean Air Act of 1990.



Since 1903

Burner #1_#2 Submittal Data

BURNER SUBMITTAL DATA

Revision: 1

Date: 2/10/2015

Customer: MB Mechanical Contractors, Inc.

P.O. 4688 (Line Item 2)

Burner Model: FD68CA500LM-SP-LN

Number of Units: 2

Control system: Fireye NX6100 w/ NXEXP300 Expansion

Fuels: 20,664 MBH Natural Gas
142 GPH #2 Oil

Fuel supply pressure: 1.8 - 3 PSI Natural Gas

Motor voltage: 460-3-60

Control voltage: 120-1-60

Code requirements: UL Standards/NFPA85

Job Name: University of Southern Maine, Portland

SO: 293939 & 293940

As previously noted,
burner motors shall
be 208/3/60.



S.T. Johnson Company

925 Stanford Ave. • Oakland, CA 94608 • USA • Phone (510) 652-6000 • Fax (510) 652-4302 • www.johnsonburners.com



Since 1903

Burner #3 Submittal Data

BURNER SUBMITTAL DATA

Revision: 1

Date: 2/10/2015

Customer: MB Mechanical Contractors, Inc.

P.O. 4688 (Line Item 1)

Burner Model: FD68CA200LM-LN

Number of Units: 1

Control system: Fireye NX6100 w/ NXEXP300 Expansion

Fuels: 6,199 MBH Natural Gas
43 GPH #2 Oil

Fuel supply pressure: 1.2 - 3 PSI Natural Gas

Motor voltage: 460-3-60

Control voltage: 120-1-60

Code requirements: UL Standards/NFPA85

Job Name: University of Southern Maine, Portland

SO: 293938

As previously noted,
burner motor shall be
208/3/60.



S.T. Johnson Company

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Boiler #1_#2 Submittal Data



HURST STEAM BOILER SALES ORDER ENTRY FORM (R23)

DATE: 01/09/15 SHIP DATE: 03/24/15 HBC J.O. NO.: 1500006
 SOLD TO: MB MECHANICAL END USER (X): UNIVERSITY OF SOUTHERN
66 COVE STREET MAINE
PORTLAND, ME 04101 PORTLAND, ME

PH: (207)-774-4911 FAX: (207)-774-4985 CONTACT: CHUCK GREENLAW
 SALES TAX NO: STATE: ME P.O. NO: 4688 D&B:
 APPROVAL SALES: CREDIT: TYPED BY: MRW

PRICING:
 TERMS OF PAYMENT: NET 30 ()

SHIP TO: COTE CRANE & RIGGING (X) PREPAY & ADD SHIPPING INSTRUCTIONS:
2980 HOTEL ROAD () 3RD PARTY CALL CHUCK GREENLAW B4
AUBURN, ME 04210 () COLLECT SHIP. (207) 774-4911
 () ALLOWED
 ()

EQUIPMENT DESCRIPTION: 500 HP; 4-PASS WETBACK LOW PRESSURE STEAM BOILER
 BOILER SERIES: 500 (4) PASS () DRY BACK (X) WET BACK () SEMI-WETBACK
 (X) SCOTCH () FIREBOX () LPE () FIRETUBE () VERTICAL () VERTICAL TUBELESS
 MODEL NO: S5 - X - 500 - 15 BHP: 500 PSPH: 17,250 MBH: 16,738
 STEAM PRESSURE: 15 PSI DESIGN; 10 PSI OPERATING ASME SECTION () I (X) IV
 FIRESIDE HEATING SURFACE: 2,500 SQ.FT. FURNACE VOLUME: 168.9 CU. FT.
 () UL LABEL B (X) ASME CSD-1 () CRN (X) SUBMITTAL DRAWING: Required
 (X) STANDARD PAINT, INSULATION & JACKET (X) SPECIAL FINISHING: PLATFORM CLIPS

PRIMARY BOILER OPENINGS: S = SCREWED F = FLANGED * = SPECIAL
 (F) MAIN STEAM OUTLET: 10" (S) FEEDWATER CONN: 2"
 (S) BLOWDOWN CONN: 2" (S) SURFACE: 1.25"
 STACK OUTLET: 24" (X) VERTICAL () HORIZONTAL (X) 5 SERIES "B" THERM. 750 °F
 (X) MANUAL DAMPER ()
 (X) 12" x 16" MANHOLE (5) 3" x 4" HAND HOLES () 2" CPLGS. () 1.5" CPLGS.
 FRONT DOOR(S): (X) HINGED (X) DAVITED REAR DOOR(S): (X) HINGED (X) DAVITED
 () EXPLOSION RELIEF DOORS REQD. () OTHER SPECIAL ITEMS:

GAUGE GLASS SET: (X) UB FIG. #34041, 250 PSI ()
 () (X) WATER COLUMN DRAIN: 1" APOLLO BALL 70-140 ()

PRIMARY LWCO: () M & M #157S (X) M&M 157MD; & SIEMENS DP (X) AUTO RESET () MR
 TRANSMITTER MOD WL C'TROL
 () ON/OFF PUMP CONTROL (X) PROPORTIONING CONTROL () FEEDER
 () AUDIBLE ALARM () LIGHT MOUNT ON: () LEFT (X) RIGHT

AUX. LWCO: () M & M # 750-MT-120, (X) WARRICK EXTERNAL () AUTO RESET (X) MR
 () AUDIBLE ALARM () LIGHT MOUNT ON: (X) LEFT () RIGHT

HWL ALARM: () M & M # 750, (X) WARRICK EXTERNAL (X) AUTO RESET () MR
 () AUDIBLE ALARM () LIGHT MOUNT ON: (X) LEFT () RIGHT

SAFETY RELIEF VALVE (S): KUNKLE FIG# 930 SET AT 15 PSI STEAM
 (3) 3" () ()



Boiler #3 Submittal Data



HURST STEAM BOILER SALES ORDER ENTRY FORM (R23)

DATE: 01/09/15 SHIP DATE: 03/24/15 HBC I.O. NO.: 1500005
 SOLD TO: MB MECHANICAL END USER (X): UNIVERSITY OF SOUTHERN
66 COVE STREET MAINE
PORTLAND, ME 04101 PORTLAND, ME

PH: (207)-774-4911 FAX: (207)-774-4985 CONTACT: CHUCK GREENLAW
 SALES TAX NO: _____ P.O. NO: 4688
 STATE: ME D&B: _____
 APPROVAL SALES: _____ CREDIT: _____ TYPED BY: MRW

PRICING: _____
 TERMS OF PAYMENT: (X) NET 30 ()

SHIP TO: COTE CRANE & RIGGING (X) PREPAY & ADD SHIPPING INSTRUCTIONS:
2980 HOTEL ROAD () 3RD PARTY CALL CHUCK GREENLAW B4
AUBURN, ME 04210 () COLLECT SHIP. (207) 774-4911
 () ALLOWED
 ()

EQUIPMENT DESCRIPTION: 150 HP; 4-PASS WETBACK LOW PRESSURE STEAM BOILER
 BOILER SERIES: 500 (4) PASS () DRY BACK (X) WET BACK () SEMI-WETBACK
 (X) SCOTCH () FIREBOX () LPE () FIRETUBE () VERTICAL () VERTICAL TUBELESS
 MODEL NO: S5 - X - 150 - 15 BHP: 150 PSPH: 5,175 MBH: 5,021
 STEAM PRESSURE: 15 PSI DESIGN; 10 PSI OPERATING ASME SECTION () I (X) IV
 FIRESIDE HEATING SURFACE: 750 SQ.FT. FURNACE VOLUME: 54.8 CU. FT.
 () UL LABEL B (X) ASME CSD-1 () CRN (X) SUBMITTAL DRAWING: Required
 (X) STANDARD PAINT, INSULATION & JACKET (X) SPECIAL FINISHING: PLATFORM CLIPS

PRIMARY BOILER OPENINGS: S = SCREWED F = FLANGED * = SPECIAL
 (F) MAIN STEAM OUTLET: 8" (S) FEEDWATER CONN: 1.25"
 (S) BLOWDOWN CONN: 2" (S) SURFACE: 1.25"
 STACK OUTLET: 16" (X) VERTICAL () HORIZONTAL (X) 5 SERIES "B" THERM. 750 °F
 (X) MANUAL DAMPER ()
 (X) 12" x 16" MANHOLE (S) 3" x 4" HAND HOLES () 2" CPLGS. () 1.5" CPLGS.
 FRONT DOOR(S): (X) HINGED (X) DAVITED REAR DOOR(S): (X) HINGED (X) DAVITED
 () EXPLOSION RELIEF DOORS REQD. () OTHER SPECIAL ITEMS:

GAUGE GLASS SET: (X) UB FIG. #34041, 250 PSI ()
 () (X) WATER COLUMN DRAIN: 1" APOLLO BALL 70-140 ()

PRIMARY LWCO: () M & M #157S (X) M&M 157MD; & SIEMENS DP (X) AUTO RESET () MR
 TRANSMITTER MOD WL C'TROL
 () ON/OFF PUMP CONTROL (X) PROPORTIONING CONTROL () FEEDER
 () AUDIBLE ALARM () LIGHT MOUNT ON: () LEFT (X) RIGHT

AUX. LWCO: () M & M # 750-MT-120, (X) WARRICK EXTERNAL () AUTO RESET (X) MR
 () AUDIBLE ALARM () LIGHT MOUNT ON: (X) LEFT () RIGHT

HWL ALARM: () M & M # 750, (X) WARRICK EXTERNAL (X) AUTO RESET () MR
 () AUDIBLE ALARM () LIGHT MOUNT ON: (X) LEFT () RIGHT

SAFETY RELIEF VALVE(S): KUNKLE FIG# 930 SET AT 15 PSI STEAM
 (1) 3" () ()



August 18, 2015

Ms. Jane Gilbert, P.E. Jane.Gilbert@maine.gov
Licensing
Maine DEP, Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Re: University of Southern Maine
CHP Portland Boiler Replacement
Portland, Maine
USM Project Number 2012-016
Harriman No. 14411
Air Emission License Narrative

Dear Jane:

Thank you for your review comments to our preliminary application. As requested, we have provided additional information to finalize the application.

Item #1:

Would you provide a more detailed narrative of the project description: What is the timing/schedule of the project – start date, projected completion date, etc.? Which boilers/generators at which locations are being removed from service, and when? Where are the replacement units to be located (same locations as their predecessors or different locations)? Will the fuel input limit for Boilers #1, #2, and #3 (not to exceed 52,500 MMBtu/year of heat input from all licensed fuels, on a 12-month rolling total basis) be changing as a result of this project?

Response to Item #1:

The project is currently under construction with a projected substantial completion date of August 31, 2015. The existing central heating plant is being renovated, but continues to remain. As part of the project scope, boilers #1, #2 and #3 have already been removed from service along with stack #1. We are installing three new boilers #1, #2 and #3 in the same locations as their predecessors. Stack #1 is not being replaced since each boiler will be vented independently. I have assigned the stack numbers 1a, 1b and 1c for boilers #1, #2 and #3 respectively.

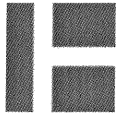
The input limit of 52,500 MMBtu/yr is not expected to change as a result of this amendment. The annual natural gas consumption for the boiler plant in 2014 was 398,191 CCF, which using a conversion factor of 102,000 Btu/CCF translates to 40,615 MMBtu/yr. As you can see, the actual annual fuel consumption of the plant is far below the maximum limit of 52,500 MMBtu/yr. There is

46 HARRIMAN DRIVE
AUBURN, ME 04210
207.784.5100

123 MIDDLE STREET
PORTLAND, ME 04101
207.775.0053

ONE PERIMETER ROAD
MANCHESTER, NH 03103
603.626.1242

www.harriman.com



Ms. Jane Gilbert

July 27, 2015

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nothing in the scope of the project which adds additional steam load to the Campus, therefore we are confident in stating that the annual fuel consumption will remain below the 52,500 MMBtu/yr limit.

Item #2:

What are the manufacturer and make/model specific to each new boiler and generator? Although this is not always included in an air emission license, it is appropriate information to have in our files.

Response to Item #2:

Boiler #1 is as follows:

Hurst Series 500, model #S5-X-500-15 boiler rated at 500 boiler horsepower with a Johnson model #FD68CA500LM-SP-LN dual fuel burner to fire natural gas and #2 fuel oil

Boiler #2 is as follows:

Hurst Series 500, model #S5-X-500-15 boiler rated at 500 boiler horsepower with a Johnson model #FD68CA500LM-SP-LN dual fuel burner to fire natural gas and #2 fuel oil

Boiler #3 is as follows:

Hurst Series 500, model #S5-X-150-15 boiler rated for 150 horsepower with a Johnson model #FD68CA200LM-LN dual fuel burner to fire natural gas and #2 fuel oil

Generator #7 is as follows:

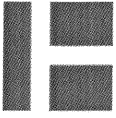
Kohler, model #125REOZJG diesel generator rated at 160 kVA

Item #3:

Each new unit is required to be controlled according to the Best Available Control Technology (BACT). See the attached document for a detailed BACT definition and explanation of the BACT determination process. As part of the application package, BACT must be addressed for each pollutant for each unit. (Yes, it's acceptable to group the boilers, since BACT for NOx emissions, for example, from one of these boilers will be the same BACT for the next.) Although the firing of natural gas with distillate fuel as a back-up is high in the BACT realm for such units, a narrative should be included documenting such, with explanation of why additional controls or pollution minimizing technologies are not feasible or appropriate in these cases. A BACT analysis is also required for the new generator. The BACT narrative for these units need not be terribly extensive, but it should at least be several paragraphs.

Response to Item #3:

The BACT analysis is provided as requested in a separate document.



Ms. Jane Gilbert

July 27, 2015

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Item #4:

Please include the basis for the proposed emission limits. Based on the BACT conclusion, what emission factors were used to determine the proposed lb/hr emission limits for each new unit? Is it AP-42 emission factors, manufacturer guarantees, or other sources? Also, include sample calculations to document the process for calculating the limits and state all assumptions (such as "based on a natural gas heat content of 1020 Btu/scf" or whatever, as appropriate).

Response to Item #4:

This item is addressed within the BACT analysis, and the spreadsheet used to calculate the values is also included as backup documentation.

Item #5:

Boilers: The maximum firing rate for natural gas is specified in the application form's table in units of MBH. Straight comparison to the previous column, "Maximum Design Capacity" in MMBtu/hr, shows inconsistency. Please include a statement of explanation as to the difference between the two.

Response to Item #5:

The maximum firing rates for natural gas and #2 fuel oil are stated on the burner submittals. I have included the burner submittal data as backup documentation for you to review. The values listed under maximum design capacity are the maximum rated boiler output values as noted in their product submittals. I have included the boiler submittal data as backup documentation for you to review.

Item #6:

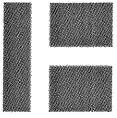
Dual-fueled boilers: Is it USM-Portland's intent to operate only on natural gas unless natural gas is not available, or do they wish to license the units as dual-fueled boilers? Applicability of 40 CFR Part 63, Subpart JJJJJ depends on the fuels fired.

Response to Item #6:

It is the intent of USM Portland to license all three boilers as dual-fueled boilers.

Item #7:

In the application form, the fuel sulfur content for the generator is identified as 0.05% by weight, but the text provided says 0.0015% by weight. For a new unit, the license will require the use of fuel with a maximum sulfur content of 0.0015% by weight, so the application form should be changed to conform with that.



Ms. Jane Gilbert

July 27, 2015

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Response to Item #7:

The application form has been changed to reflect a maximum sulfur content of 0.0015% by weight.

If you have any additional questions or concerns, please feel free to let me know.

Sincerely,

Harriman

Jeff LaPierre, P.E., LEED AP
Senior Mechanical Engineer
jlapierre@harriman.com

Facility name: USM Portland Campus
Date: 8/18/2015

Boilers #1 & 2:

#6 FUEL	
Boiler BTU Rating:	39.76 MMBtu/hr
Boiler Firing rate:	265 gal/hr
Btu/gal #6	150000 Btu/gal
Oil Density	7.83 lb/gal
Fuel % sulfur:	%
Pollutant	Factor Units lb/hr emissions
PM & PM10:	0.08 lb/MMBtu 3.1808 Ch 103
SO2	1.047 lb/MMBtu 41,629 mass balance
NOx	0.367 lb/MMBtu 14,59192 similar boilers
CO	0.005 lb/gal 1,325 AP-42
VOC	0.00028 lb/gal 0.074 AP-42

FUEL OIL TON PER YEAR EMISSIONS

fuel cap	304325 gal/yr	lb/1000 gal
PM & PM10:	1.82595 ton/yr	12
SO2	23.98081 ton/yr	157.05
NOx	8.3765456 ton/yr	55.05
CO	0.7608125 ton/yr	5
VOC	0.0426055 ton/yr	0.28

Boiler #3:

#6 FUEL	
Boiler BTU Rating:	6.02 MMBtu/hr
Boiler Firing rate:	40.13333 gal/hr
Btu/gal #6	150000 Btu/gal
Oil Density	7.83 lb/gal
Fuel % sulfur:	1 %
Pollutant	Factor Units lb/hr emissions
PM & PM10:	0.08 lb/MMBtu 0.4816 Ch 103
SO2	1.047 lb/MMBtu 6,30294 mass balance
NOx	0.367 lb/MMBtu 2,20934 similar boilers
CO	0.005 lb/gal 0.200667 AP-42
VOC	0.00028 lb/gal 0.11237 AP-42

FUEL OIL TON PER YEAR EMISSIONS

fuel cap	45675 gal/yr	lb/1000 gal
PM & PM10:	0.27405 ton/yr	12
SO2	3.59919 ton/yr	157.05
NOx	1.257204 ton/yr	55.05
CO	0.114188 ton/yr	5
VOC	0.0063995 ton/yr	0.28

Boilers #1 & 2:

#2 FUEL	
Boiler BTU Rating:	39.76 MMBtu/hr
Boiler Firing rate:	284 gal/hr
Btu/gal #2	140000 Btu/gal
Oil Density	7.05 lb/gal
Fuel % sulfur:	0.35 %
Pollutant	Factor Units lb/hr emissions
PM & PM10:	0.0714 lb/MMBtu 0.55664 Ch 103
SO2	0.355 lb/MMBtu 14,1148 mass balance
NOx	0.143 lb/MMBtu 5,68568 similar boilers
CO	0.005 lb/gal 1.42 AP-42
VOC	0.0002 lb/gal 0.0568 AP-42

FUEL OIL TON PER YEAR EMISSIONS

fuel cap	326062 gal/yr	lb/1000 gal
PM & PM10:	0.319541 ton/yr	1.96
SO2	8.04558 ton/yr	142
NOx	3.263881 ton/yr	20.02
CO	0.815155 ton/yr	5
VOC	0.032606 ton/yr	0.2

Boiler #3

#2 FUEL	
Boiler BTU Rating:	6.02 MMBtu/hr
Boiler Firing rate:	43 gal/hr
Btu/gal #2	140000 Btu/gal
Oil Density	7.05 lb/gal
Fuel % sulfur:	0.35 %
Pollutant	Factor Units lb/hr emissions
PM & PM10:	0.0714 lb/MMBtu 0.08428 Ch 103
SO2	0.355 lb/MMBtu 2,1371 mass balance
NOx	0.143 lb/MMBtu 0.86036 similar boilers
CO	0.005 lb/gal 0.215 AP-42
VOC	0.0002 lb/gal 0.0086 AP-42

FUEL OIL TON PER YEAR EMISSIONS

fuel cap	48938 gal/yr	lb/1000 gal
PM & PM10:	0.047959 ton/yr	1.96
SO2	1.207545 ton/yr	142
NOx	0.489669 ton/yr	20.02
CO	0.122345 ton/yr	5
VOC	0.004894 ton/yr	0.2

Boilers #1 & 2:

#2 FUEL w/ FGR	
Boiler BTU Rating:	39.76 MMBtu/hr
Boiler Firing rate:	284 gal/hr
Btu/gal #2	140000 Btu/gal
Oil Density	7.05 lb/gal
Fuel % sulfur:	0.35 %
Pollutant	Factor Units lb/hr emissions
PM & PM10:	0.0714 lb/MMBtu 0.55664 Ch 103
SO2	0.355 lb/MMBtu 14,1148 mass balance
NOx	0.08294 lb/MMBtu 3,297694 similar boilers
CO	0.005 lb/gal 1.42 AP-42
VOC	0.0002 lb/gal 0.0568 AP-42

FUEL OIL TON PER YEAR EMISSIONS

fuel cap	326062 gal/yr	lb/1000 gal
PM & PM10:	0.319541 ton/yr	1.96
SO2	8.04558 ton/yr	142
NOx	1.893051 ton/yr	11.6116
CO	0.815155 ton/yr	5
VOC	0.032606 ton/yr	0.2

Boiler #3

#2 FUEL w/ FGR	
Boiler BTU Rating:	6.02 MMBtu/hr
Boiler Firing rate:	43 gal/hr
Btu/gal #2	140000 Btu/gal
Oil Density	7.05 lb/gal
Fuel % sulfur:	0.35 %
Pollutant	Factor Units lb/hr emissions
PM & PM10:	0.0714 lb/MMBtu 0.08428 Ch 103
SO2	0.355 lb/MMBtu 2,1371 mass balance
NOx	0.08294 lb/MMBtu 0.499299 similar boilers
CO	0.005 lb/gal 0.215 AP-42
VOC	0.0002 lb/gal 0.0086 AP-42

FUEL OIL TON PER YEAR EMISSIONS

fuel cap	48938 gal/yr	lb/1000 gal
PM & PM10:	0.047959 ton/yr	1.96
SO2	1.207545 ton/yr	142
NOx	0.284124 ton/yr	11.6116
CO	0.122345 ton/yr	5
VOC	0.004894 ton/yr	0.2

Facility name: USM Portland Campus
 Date: 8/18/2015

Natural Gas Boilers #1 & #2

BTU Rating: 41,328 MMBtu/hr
 Firing rate: 40517.65 scf/hr
 Btu/scf 1020 Btu/scf

Pollutant	Factor	Units	lb/hr emissions	Factor	Units	lb/hr
PM & PM10:	0.007451	lb/MMBtu	0.307935	7.6	lb/scf ^{10^6}	0.307935 AP-42
SO2	0.0005882	lb/MMBtu	0.024311	0.6	lb/scf ^{10^6}	0.024311 AP-42
NOx	0.0980392	lb/MMBtu	4.051765	100	lb/scf ^{10^6}	4.051765 AP-42
CO	0.0823529	lb/MMBtu	3.403482	84	lb/scf ^{10^6}	3.403482 AP-42
VOC	0.0053922	lb/MMBtu	0.222847	5.5	lb/scf ^{10^6}	0.222847 AP-42

TOTAL TONS PER YEAR:

fuel cap 39632353 scf/yr

PM & PM10:	0.1506033
SO2	0.0118897
NOx	1.9816177
CO	1.6645588
VOC	0.108989

Natural Gas Boiler #3

BTU Rating: 6,199 MMBtu/hr
 Firing rate: 6077.451 scf/hr
 Btu/scf 1020 Btu/scf

Pollutant	Factor	Units	lb/hr emissions	Factor	Units	lb/hr
PM & PM10:	0.007451	lb/MMBtu	0.046189	7.6	lb/scf ^{10^6}	0.046189 AP-42
SO2	0.0005882	lb/MMBtu	0.003646	0.6	lb/scf ^{10^6}	0.003646 AP-42
NOx	0.0980392	lb/MMBtu	0.607745	100	lb/scf ^{10^6}	0.607745 AP-42
CO	0.0823529	lb/MMBtu	0.510506	84	lb/scf ^{10^6}	0.510506 AP-42
VOC	0.0053922	lb/MMBtu	0.033426	5.5	lb/scf ^{10^6}	0.033426 AP-42

TOTAL TONS PER YEAR:

fuel cap 6691176 scf/yr

PM & PM10:	0.0254265
SO2	0.0020074
NOx	0.3345588
CO	0.2810294
VOC	0.0184007

Natural Gas Boilers #1 & #2 w/ FGR

BTU Rating: 41,328 MMBtu/hr
 Firing rate: 40517.65 scf/hr
 Btu/scf 1020 Btu/scf

Pollutant	Factor	Units	lb/hr emissions	Factor	Units	lb/hr
PM & PM10:	0.007451	lb/MMBtu	0.307935	7.6	lb/scf ^{10^6}	0.307935 AP-42
SO2	0.0005882	lb/MMBtu	0.024311	0.6	lb/scf ^{10^6}	0.024311 AP-42
NOx	0.0313725	lb/MMBtu	1.296565	32	lb/scf ^{10^6}	1.296565 AP-42
CO	0.0823529	lb/MMBtu	3.403482	84	lb/scf ^{10^6}	3.403482 AP-42
VOC	0.0053922	lb/MMBtu	0.222847	5.5	lb/scf ^{10^6}	0.222847 AP-42

TOTAL TONS PER YEAR:

fuel cap 39632353 scf/yr

PM & PM10:	0.1506033
SO2	0.0118897
NOx	0.6341176
CO	1.6645588
VOC	0.108989

Natural Gas Boiler #3 w/ FGR

BTU Rating: 6,199 MMBtu/hr
 Firing rate: 6077.451 scf/hr
 Btu/scf 1020 Btu/scf

Pollutant	Factor	Units	lb/hr emissions	Factor	Units	lb/hr
PM & PM10:	0.007451	lb/MMBtu	0.046189	7.6	lb/scf ^{10^6}	0.046189 AP-42
SO2	0.0005882	lb/MMBtu	0.003646	0.6	lb/scf ^{10^6}	0.003646 AP-42
NOx	0.0313725	lb/MMBtu	0.194478	32	lb/scf ^{10^6}	0.194478 AP-42
CO	0.0823529	lb/MMBtu	0.510506	84	lb/scf ^{10^6}	0.510506 AP-42
VOC	0.0053922	lb/MMBtu	0.033426	5.5	lb/scf ^{10^6}	0.033426 AP-42

TOTAL TONS PER YEAR:

fuel cap 6691176 scf/yr

PM & PM10:	0.0254265
SO2	0.0020074
NOx	0.1070588
CO	0.2810294
VOC	0.0184007

facility USM Portland Campus

date 8/18/2015

unit #7

Gen Power Rating:	292.7044 kW
Efficiency	30 %
Power In:	975.6812 kW
Diesel BTU Rating:	3.33 MMBtu/hr
Diesel Firing rate:	24.30657 gal/hr
Power output	406.8591 HP
Fuel % sulfur:	0.0015 %
Btu/gal of fuel	137000 Btu/gal

Pollutant	Factor	Units	lb/hr emissions	
PM & PM10*	0.31	lb/MMBtu	1.0323	AP-42, 10/96
SO2**	0.290	lb/MMBtu	0.9657	mass balance
NOx***	4.41	lb/MMBtu	14.6853	AP-42, 10/96
CO***	0.95	lb/MMBtu	3.1635	AP-42, 10/96
VOC***	0.35	lb/MMBtu	1.1655	AP-42, 10/96

*MEDEP Chapter 103

**Mass balance: All S in fuel into SO2

***AP-42 dated 10/96 for diesels up to 600 hp

firing limit	500 hr/yr
fuel limit	12153.285 gal/yr

		lb/1000 gal
PM & PM10:	0.258 tpy	42.47
SO2	0.241 tpy	39.73
NOx	3.671 tpy	604.17
CO	0.791 tpy	130.15
VOC	0.291 tpy	47.95

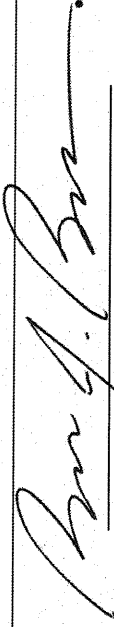


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2014 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990

**OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105**

Certificate Issued To: Deere & Company
(U.S. Manufacturer or Importer)
Certificate Number: EJDXL06.8120-010

Effective Date:
09/10/2013
Expiration Date:
12/31/2014


Byron J. Bunker, Division Director
Compliance Division

Issue Date:
09/10/2013
Revision Date:
N/A

Model Year: 2014
Manufacturer Type: Original Engine Manufacturer
Engine Family: EJDXL06.8120

Mobile/Stationary Indicator: Stationary
Emissions Power Category: 130<=kW<225
Fuel Type: Diesel
After Treatment Devices: No After Treatment Devices Installed
Non-after Treatment Devices: Non-standard Non-After Treatment Device Installed, Electronic Control, Smoke Puff Limiter, Engine Design Modification

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

The actual engine power may lie outside the limits of the Emissions Power Category shown above. See the certificate application for details.