



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

McCain Foods USA, Inc.
Aroostook County
Easton, Maine
A-436-70-D-R/A

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal with Amendment

FINDINGS OF FACT

After review of the Part 70 License renewal and amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	McCain Foods USA, Inc. (McCain)
LICENSE TYPE	Part 70 License Renewal Part 70 Significant License Modification
NAICS CODES	311411
NATURE OF BUSINESS	Frozen Potato Products
FACILITY LOCATION	Richardson Rd, Easton, Maine

McCain Foods USA, Inc. (McCain) of Easton, Maine is licensed to operate emission sources associated with their potato processing facility.

McCain has the potential to emit more than 100 tons per year (TPY) of particulate matter (PM), sulfur dioxide (SO₂) and nitrogen oxides (NO_x) and more than 100,000 tons of carbon dioxide equivalent (CO₂e). Therefore, the source is a major source for criteria pollutants. McCain does not have the potential to emit 10 TPY or more of a single hazardous air pollutant (HAP) or 25 TPY or more of combined HAP. Therefore, the source is an area source for HAP.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Boilers & Flare

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Manufacture Date	Stack #
Boiler #5	98.5	704 gal/hr 96,568 scf/hr	distillate fuel, 0.5% spec. waste oil, 0.5% vegetable oil natural gas	1998	5
Boiler #8	49.5 37.8 (biogas)	354 gal/hr 48,529 scf/hr 60,000 scf/hr	distillate fuel, 0.5% spec. waste oil, 0.5% vegetable oil natural gas biogas	2005	17
Boiler #9	49.5 37.8 (biogas)	354 gal/hr 48,529 scf/hr 60,000 scf/hr	distillate fuel, 0.5% spec. waste oil, 0.5% vegetable oil natural gas biogas	2005	18
Sludge Heater	2.7	29.1 gal/hr 4,222 scf/hr	propane biogas	2012	20
Biogas Flare	26.5	0.6 gal/hr 42,000 scf/hr	propane biogas	1998	N/A

Engines

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf.
Fire Pump	1.0	7.4	distillate fuel, 0.0015%	1999
Emergency Generator	1.6	11.7	distillate fuel, 0.0015%	2002

Process Equipment

Line	Equipment	Production Rate	Pollution Control Equipment
Line 1	Prime 1 Dryer	30,000 lbs of finished product/hr	none
	Prime 1 Fryer	30,000 lbs of finished product/hr	rotoclone
Line 2	Specialty Fryer	15,000 lbs of finished product/hr	rotoclone
Line 3	Prime 2 Dryer	45,000 lbs of finished product/hr	none
	Prime 2 Fryer	45,000 lbs of finished product/hr	rotoclones (2)

Additional Equipment

Equipment	Pollution Control Equipment
Anaerobic Digester	biogas flare
Parts Washers	none

McCain has additional insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended).

C. Application Classification

The application for McCain is for the renewal of their existing Part 70 Air License and subsequent Part 70 amendments. Pursuant to Section 2(A) of 06-096 Code of Maine Rules (CMR) 140, McCain has also requested incorporation into the Part 70 Air License the relevant terms and conditions of the 06-096 CMR 115 New Source Review (NSR) licenses issued to McCain, including the following:

License Number	Issued Date
A-436-77-1-M	6/30/2011
A-436-77-2-A	1/6/2012
A-436-77-3-M	4/6/2012
A-436-77-4-M	8/23/2012
A-436-77-5-A	4/24/2015

Therefore, the license is considered to be a Part 70 License renewal with the incorporation of NSR requirements.

D. Facility Description

McCain's Easton facility is a potato processing plant which produces frozen potato products, such as french fries and tater tots, for the retail and service markets. Raw potatoes are delivered to the facility by truck. Before processing, the potatoes are sent through rock traps to remove any rocks or other large foreign material and through brushes to wash and remove soil. The washed potatoes are steam peeled, scrubbed, and then conveyed by water to the trim room for removal of undesirable portions or rejection. Prior to moving to the cutter deck, the potatoes are pre-heated to minimize shattering during the cutting process.

Following cutting, the potatoes are fed through automatic defect removers and then move through one of three fryer lines. Line 1 is the prime 1 fryer line, used to produce prime product. Line 2 is the specialty line, used to process specialty products, such as tater tots and potato wedges. Line 3 is the prime 2 fryer line, which is used to produce both prime and batter product. Prior to frying, the potatoes are blanched to create a better color after frying. Lines 1 and 3 include dryers which remove excess moisture and set the starches prior to the potatoes being fried in vegetable oil. A retrograder (no air emissions), rather than a dryer, is used on Line 2. Following frying, the potatoes are frozen and packaged.

McCain operates a waste water treatment facility which produces biogas that is either fired as a fuel in Boiler #8, Boiler #9, or the Sludge Heater or flared. In addition, McCain operates an anaerobic digester which digests potato waste to produce biogas to be used as a fuel in Boiler #8, Boiler #9 or the Sludge Heater. Any excess biogas is flared.

E. General Facility Requirements

McCain is subject to the following state and federal regulations listed below, in addition to the regulations listed for specific units as described further in this license.

CITATION	REQUIREMENT TITLE
06-096 CMR 101	Visible Emissions
06-096 CMR 102	Open Burning
06-096 CMR 103	Fuel Burning Equipment Particulate Emission Standard
06-096 CMR 105	General Process Source Particulate Emission Standard
06-096 CMR 106	Low Sulfur Fuel
06-096 CMR 109	Emergency Episode Regulation
06-096 CMR 110	Ambient Air Quality Standard

06-096 CMR 115	Major and Minor Source Air emission License Regulations
06-096 CMR 116	Prohibited Dispersion Techniques
06-096 CMR 130	Solvent Degreasers
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 143	New Source Performance Standards
06-096 CMR 144	National Emission Standards for Hazardous Air Pollutants (NESHAP)
40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR Part 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
40 CFR Part 64	Compliance Assurance Monitoring
40 CFR Part 70	State Operating Permit Programs
40 CFR Part 98	Mandatory Greenhouse Gas Reporting

Note: CMR = Code of Maine Regulations
 CFR = Code of Federal Regulations

F. Units of Measurement

The following units of measurement are used in this license:

Btu	British Thermal Unit
dscf	dry standard cubic feet
gal/hr	gallons per hour
grains/dscf	grains per dry standard cubic feet
hr/year	hours per year
lb/dscf	pounds per dry standard cubic feet
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
MMBtu/hr	million British Thermal Units per hour
ton/year or tpy	tons per year

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

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 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 emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. NO_x RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 CMR 138 (as amended) is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons/year. Boiler #5 is a mid-size boiler, and NO_x RACT is determined to be use of low NO_x burners, staged air combustion, flue gas recirculation and a NO_x limit of 0.30 lb/MMBtu. Boilers #8 and #9 are considered small boilers, and NO_x RACT is determined to be use of low NO_x burners, staged air combustion, flue gas recirculation, a NO_x limit of 0.33 lb/MMBtu, and annual tune-ups. The NO_x RACT requirements are incorporated in this renewal.

C. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 CMR 134 (as amended) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year. McCain's potential to emit VOC (excluding exempt equipment) is less than 40 ton/year. Therefore, 06-096 CMR 134 is not applicable to this source.

D. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility which falls into any one of the following three categories, per 40 CFR Part 98, Subpart A, *General Provision*, § 98.2, *Who must report?*

- (a)(1) A facility that contains any source category that is listed in Table A-3 of this subpart in any calendar year starting in 2010.
- (a)(2) A facility that contains any source category that is listed in Table A-4 of this subpart and that emits 25,000 metric tons CO₂e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A-3 and Table A-4 of this subpart.
- (a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.
 - (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
 - (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.
 - (iii) The facility emits 25,000 metric tons CO₂e or more per year in combined emissions from all stationary fuel combustion sources.

McCain's facility includes an Industrial Wastewater Treatment facility, as defined by 40 CFR Part 98 Subpart II and found in Table A-4 of Subpart A, and thus is subject under (a)(2) above. This facility shall fulfill the recordkeeping and reporting requirements of 40 CFR Part 98.

E. PSD/BACT Review

The Department issued Air License A-436-70-B-A on 4/13/06 to McCain. The license was issued to permit construction of Boilers #8 and #9. The license was issued pursuant to federal Prevention of Significant Deterioration (PSD) requirements and the Department's air licensing requirements for major modifications.

F. Compliance Assurance Monitoring (CAM)

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*, is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100 tons/year for any pollutant.

The Fire Pump, Emergency Generator, Sludge Heater, Biogas Flare, and dryers are not subject to CAM because they do not use control devices to meet emission limits. The potential uncontrolled emissions from each fryer are less than major source thresholds. Therefore, the fryers are also not subject to CAM.

McCain has previously submitted a CAM plan for NO_x from Boilers #5, #8, and #9. The CAM proposal included monitoring the flue gas recirculation system

damper position for each boiler. The CAM requirements are incorporated in this renewal.

G. Boiler #5

Boiler #5 was manufactured in 1998 by English Boiler & Tube with a maximum design heat input capacity of 98.5 MMBtu/hr firing #6 fuel oil with a maximum sulfur content of 0.5% by weight.

In 2012 McCain added the option to fire natural gas and distillate fuel in Boiler #5 while retaining the ability to fire #6 fuel oil. In 2015, McCain removed the ability to fire #6 fuel oil in Boiler #5 by decommissioning and removing all #6 fuel oil storage facilities. This boiler may also fire specification waste oil and vegetable oil. This boiler is used to provide steam for process operations as well as for heating purposes.

Emissions exit through stack #5, which has an above ground level (AGL) height of 110 feet.

1. New Source Performance Standards (NSPS)

Boiler #5 is subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc. This standard applies to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

Subpart Dc contains more stringent emission limits for PM for boilers which commenced construction, reconstruction, or modification after February 28, 2005. A modification is defined as any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies. In 2012 McCain added the firing of natural gas and distillate fuel to their fuel mix. However, this change is not considered a modification because it does not cause an increase in emissions of either PM or SO₂, the two pollutants for which there are standards in Subpart Dc.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Gas-fired boilers are exempt from *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJ). However, boilers which fire fuel oil are not. McCain wishes to maintain the ability to fire oil in Boiler #5 beyond what is provided for in the definition of "gas-fired boiler".

Therefore, Boiler #5 is subject to the requirements of 40 CFR Part 63, Subpart JJJJJ and is considered as an existing oil boiler. The requirements of this subpart are covered in a separate section below.

3. Control Equipment

Boiler #5 is equipped with low NO_x burners and flue gas recirculation (FGR) for control of NO_x emissions. The position of the FGR damper has been determined by the manufacturer and the damper is bolted in a fixed position.

4. Emission Limits and Streamlining

For Boiler #5 a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.08 lb/MMBtu	06-096 CMR 103, §2(B)(1)(b)	0.08 lb/MMBtu
	7.9 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	7.9 lb/hr
	4.9 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	4.9 lb/hr (when firing only natural gas)
PM ₁₀	7.9 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	7.9 lb/hr
	4.9 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	4.9 lb/hr (when firing only natural gas)
SO ₂	0.5% S limit, by weight	40 CFR Part 60, Subpart Dc, §60.42c(d)	0.5% S limit, by weight
	0.005% S (50 ppm) fuel beginning 7/1/16	38 MRSA §603-A(2)(A)(3)(a)	0.005% S (50 ppm) fuel beginning 7/1/16
	0.0015% S (15 ppm) fuel beginning 1/1/18	38 MRSA §603-A(2)(A)(3)(b)	0.0015% S (15 ppm) fuel beginning 1/1/18
	51.2 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	51.2 lb/hr
	0.1 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	0.1 lb/hr (when firing only natural gas)

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO _x	0.14 lb/MMBtu	06-096 CMR 140, BPT (A-436-77-5-A)	0.14 lb/MMBtu
	14.1 lb/hr	06-096 CMR 140, BPT (A-436-77-5-A)	14.1 lb/hr
	3.1 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	3.1 lb/hr (when firing only natural gas)
CO	8.1 lb/hr	06-096 CMR 140, BPT (A-436-77-3-M & A-436-77-5-A)	8.1 lb/hr
VOC	0.84 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	0.84 lb/hr
	0.5 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	0.5 lb/hr (when firing only natural gas)
Visible Emissions	20% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period	06-096 CMR 101, §2(B)(1)(b)	20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity *
	20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity	40 CFR Part 60, Subpart Dc, §60.43c(c)	
	when firing only natural gas: 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period	06-096 CMR 101, §2(B)(1)(c)	when firing only natural gas: 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period

Table Notes: * streamlining requested
 % S = percent fuel sulfur, by weight

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler #5 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring (CAM)

For Boiler #5, CAM is applicable to NO_x. The CAM monitoring requirements are included in the monitoring sections below.

7. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for Boiler #5 and its associated air pollution control equipment. Periodic monitoring requirements that are required for CAM are indicated as such.

- a. Gallons of distillate fuel fired on a monthly and 12-month rolling total basis.
- b. Gallons of specification waste oil fired on a monthly and 12-month rolling total basis.
- c. Gallons of vegetable oil fired on a monthly and 12-month rolling total basis.
- d. Standard cubic feet of natural gas fired on a monthly and 12-month rolling total basis.
- e. Sulfur content of distillate fuel fired based on fuel supplier certification.
- f. Records of a representative sample of waste oil demonstrating it meets the requirements to be considered specification waste oil.
- g. Position (open or closed) of the FGR damper, observed and recorded once per day whenever Boiler #5 is in operation. This monitoring requirement is included in McCain's CAM plan.

8. Parameter Monitors

There are no Parameter Monitors required for Boiler #5.

9. CEMS and COMS

There are no CEMS or COMS required for Boiler #5.

H. Boilers #8 & #9

Boilers #8 and #9 were manufactured in 2005 by Nebraska Boiler, each with a maximum design heat input capacity of 49.5 MMBtu/hr firing #6 fuel oil with a maximum sulfur content of 0.5% by weight. Both boilers were also originally licensed to fire specification waste oil and vegetable oil.

When originally installed in 2006, Boiler #8 was equipped with a dual-fuel burner which allows combustion of biogas from the facility's wastewater treatment system in addition to fuel oil.

In 2012 McCain added the option to fire natural gas and distillate fuel in Boilers #8 and #9 while retaining the ability to fire #6 fuel oil. In addition, McCain added the ability to fire biogas to Boiler #9. Both Boilers #8 and #9 also can receive biogas from a waste digester installed at the facility in 2012. In 2015, McCain removed the ability to fire #6 fuel oil in Boilers #8 and #9 by decommissioning and removing all #6 fuel oil storage facilities.

The maximum production of biogas from the waste water treatment plant and the digester combined is 60,000 cubic feet/hour. This equates to 37.8 MMBtu/hr. Therefore, the maximum amount of biogas that can be fired in either boiler at any time is 37.8 MMBtu/hr. The SO₂ lb/hr emission limits described below are based on the worst case scenario of firing 37.8 MMBtu/hr of biogas combined with 11.7 MMBtu/hr of distillate oil.

Emissions exit through separate stacks. Boiler #8 exhausts through Stack #17, and Boiler #9 exhausts through Stack #18. Both stacks are 90 feet AGL.

1. New Source Performance Standards (NSPS)

Boilers #8 and #9 are both subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc. This standard applies to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

Subpart Dc contains more stringent emission limits for PM for boilers which commenced construction, reconstruction, or modification after February 28, 2005. Boilers #8 and #9 were constructed after this date, and in 2012 McCain added the firing of natural gas and distillate fuel to fuel mix for Boilers #8 and #9 as well as biogas to the fuel mix for Boiler #9.

However, boilers which fire only oil which contains no more than 0.5% sulfur by weight and other fuels not subject to a PM emission standard under

Subpart Dc are not subject to the PM emission limits in Subpart Dc per 40 CFR 60.43c(e)(4). Therefore, when firing distillate fuel, Boilers #8 and #9 are only subject to the opacity limitations in Subpart Dc and not the numerical PM emission limits.

The addition of natural gas in 2012 is not considered a modification because this change did not result in an increase in any pollutant regulated by Subpart Dc.

Biogas is not intended as a fuel subject to the requirements specified in Subpart Dc. The intent of the SO₂ limitations in Subpart Dc is to establish emission standards for fossil fuels. Biogas is not considered a “fossil fuel” (as defined in 40 CFR Part 60 Subpart D) because it is not derived from natural gas, petroleum, or coal. Therefore, the combustion of biogas in Boilers #8 and #9 does not trigger any additional requirements for this equipment under Subpart Dc.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Gas-fired boilers are exempt from *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJ). However, boilers which fire fuel oil are not. McCain wishes to maintain the ability to fire oil in Boilers #8 and #9 beyond what is provided for in the definition of “gas-fired boiler”. Therefore, Boilers #8 and #9 are subject to the requirements of 40 CFR Part 63, Subpart JJJJJ and are considered existing oil boilers.

The requirements of this subpart are covered in a separate section below.

3. Control Equipment

Boilers #8 and #9 are equipped with low NO_x burners and flue gas recirculation (FGR) for control of NO_x emissions. For each boiler, the FGR fan and damper operate when the boiler is running, except during startup and shutdown. If (during normal operation) either the fan is not operating or the damper is closed, an alarm is triggered, the problem identified, and corrective action is taken.

4. Emission Limits and Streamlining

For Boilers #8 and #9 a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. The following emission standards and limits apply to each boiler.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.08 lb/MMBtu	06-096 CMR 103, §2(B)(1)(b)	0.08 lb/MMBtu
	4.0 lb/hr	06-096 CMR 140, BPT (A-436-70-B-A)	4.0 lb/hr
	2.5 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	2.5 lb/hr (when firing only natural gas)
PM ₁₀	4.0 lb/hr	06-096 CMR 140, BPT (A-436-70-B-A)	4.0 lb/hr
	2.5 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	2.5 lb/hr (when firing only natural gas)
SO ₂	distillate fuel: 0.5% S limit, by weight	40 CFR Part 60, Subpart Dc, §60.42c(d)	distillate fuel: 0.5% S limit, by weight
	distillate fuel: 0.005% S (50 ppm) fuel beginning 7/1/16	38 MRSA §603-A(2)(A)(3)(a)	distillate fuel: 0.005% S (50 ppm) fuel beginning 7/1/16
	distillate fuel: 0.0015% S (15 ppm) fuel beginning 1/1/18	38 MRSA §603-A(2)(A)(3)(b)	distillate fuel: 0.0015% S (15 ppm) fuel beginning 1/1/18
	48.9 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	48.9 lb/hr
	0.1 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	0.1 lb/hr (when firing only natural gas)
NO _x	0.14 lb/MMBtu	06-096 CMR 140, BPT (A-436-77-5-A)	0.14 lb/MMBtu
	7.1 lb/hr	06-096 CMR 140, BPT (A-436-77-5-A)	7.1 lb/hr
	1.6 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	1.6 lb/hr (when firing only natural gas)
CO	4.1 lb/hr	06-096 CMR 140, BPT (A-436-77-3-M & A-436-77-5-A)	4.1 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC	0.40 lb/hr	06-096 CMR 140, BPT (A-436-70-B-A)	0.40 lb/hr
	0.3 lb/hr (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	0.3 lb/hr (when firing only natural gas)
Visible Emissions	20% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period	06-096 CMR 101, §2(B)(1)(b)	20% opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity *
	20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity	40 CFR Part 60, Subpart Dc, §60.42c(c)	
	when firing only natural gas: 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period	06-096 CMR 101, §2(B)(1)(c)	when firing only natural gas: 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period

Table Notes: * streamlining requested
% S = percent fuel sulfur, by weight

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boilers #8 and #9 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring (CAM)

For Boilers #8 & #9, CAM is applicable to NO_x. The CAM monitoring requirements are included in the monitoring sections below.

7. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for each boiler (Boilers #8 & #9) and its associated air pollution control equipment.

Periodic monitoring requirements that are required for CAM are indicated as such.

- a. Gallons of distillate fuel fired on a monthly and 12-month rolling total basis.
- b. Gallons of specification waste oil fired on a monthly and 12-month rolling total basis.
- c. Gallons of vegetable oil fired on a monthly and 12-month rolling total basis.
- d. Standard cubic feet of natural gas fired on a monthly and 12-month rolling total basis.
- e. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis.
- f. Sulfur content of distillate fuel fired based on fuel supplier certification.
- g. Records of a representative sample of waste oil demonstrating it meets the requirements to be considered specification waste oil.
- h. Daily hours of operation for each boiler.
- i. Position (open or closed) of each FGR damper, observed and recorded once per day whenever the boiler is in operation as well as a log of any alarms generated and the corrective action taken. This monitoring requirement is included in McCain's CAM plan.
- j. Status (operating or not) of each FGR blower, observed and recorded once per day whenever the boiler is in operation as well as a log of any alarms generated and the corrective action taken. This monitoring requirement is included in McCain's CAM plan.

8. Parameter Monitors

There are no Parameter Monitors required for Boilers #8 and #9.

9. CEMS and COMS

There are no CEMS or COMS required for Boilers #8 and #9.

I. 40 CFR Part 63 Subpart JJJJJJ (Area Source Boiler MACT)

Boilers #5, #8, and #9 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJJ). These units are considered existing oil boilers.

A summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJJ requirements is listed below. 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 CFR Part 63.11225(a)(2)]

b. Boiler Tune-Up Program

i. A boiler tune-up program was to be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR Part 63.11223]

(a) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
Existing Oil fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years
<i>Boilers with less frequent tune up requirements</i>	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
With a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR Part 63.11223(a) and Table 2]

(b) The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured at high fire or typical operating load, before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report

shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

- ii. 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; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 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 CFR Part 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; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
 - (d) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 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 CFR Part 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 CFR Part 63.11223(b)(7)]
- iii. After conducting the initial boiler tune-up, a Notification of Compliance Status was to be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

c. Energy Assessment

Boilers #5, #8, and #9 are subject to the energy assessment requirement as follows:

- i. A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(3)]
- ii. The energy assessment was required to include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
[40 CFR Part 63, Table 2(4)]
- iii. A Notification of Compliance Status was required to be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]

2. Recordkeeping

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 notifications and reports with supporting compliance documentation; 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. 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. [63.1125(a)(4)(vi)]

J. Sludge Heater

McCain operates the Sludge Heater to aid in the heating of the digester. It maintains the digester internal temperature at approximately 95°F by preheating the incoming potato slurry. It was manufactured in 2012 with a maximum heat input of 2.7 MMBtu/hr. The Sludge Heater fires propane on startup and primarily biogas when operating.

With the exception of SO₂, emissions from the Sludge Heater are equivalent to those of propane. Emissions of SO₂ are based on an estimated concentration of hydrogen sulfide (H₂S) in the biogas of 0.57%.

1. New Source Performance Standards (NSPS)

Due to the size of the unit, the Sludge Heater is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc. This standard applies to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The Sludge Heater is a direct fired unit that heats the potato slurry. It does not heat water. It does not meet the definition of a “boiler” and therefore, is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). In addition, this unit fires only gaseous fuel and would also be considered exempt from Subpart JJJJJ as a gas-fired unit.

3. Emission Limits and Streamlining

For the Sludge Heater a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.05 lb/MMBtu	06-096 CMR 140, BPT (A-436-77-2-A)	0.05 lb/MMBtu
	0.1 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	0.1 lb/hr
PM ₁₀	0.1 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	0.1 lb/hr
SO ₂	3.0 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	3.0 lb/hr
NO _x	0.4 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	0.4 lb/hr
CO	0.3 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	0.3 lb/hr
VOC	0.1 lb/hr	06-096 CMR 140, BPT (A-436-77-2-A)	0.1 lb/hr
Visible Emissions	when firing propane: 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period	06-096 CMR 101, §2(B)(1)(c)	when firing propane: 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hr period
	when firing biogas: 30% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute block averages in a 3-hr period	06-096 CMR 101, §2(B)(1)(f)	when firing biogas: 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block averages in a 3-hr period*
	when firing biogas: 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block averages in a 3-hr period	06-096 CMR 140, BPT (A-436-77-2-A)	

Table Notes: * streamlining requested

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Sludge Heater shall be demonstrated in accordance with the appropriate test methods upon request by the Department.

5. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Sludge Heater.

- a. Gallons of propane fired on a monthly and 12-month rolling total basis.
- b. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis.

6. Parameter Monitors

There are no Parameter Monitors required for the Sludge Heater.

7. CEMS and COMS

There are no CEMS or COMS required for the Sludge Heater.

K. Biogas Flare

McCain flares excess biogas from the waste water treatment facility and anaerobic Digester that cannot be used by the facility's boilers or Sludge Heater. The maximum heat input capacity of the Biogas Flare is 26.5 MMBtu/hr.

The flare uses a small amount of propane to fuel a pilot light that is continuously operated to insure combustion occurs whenever biogas is present. The maximum amount of propane that can be physically used by the Biogas Flare annually is approximately 5,500 gallons. Therefore, emissions from the firing of propane in the Biogas Flare pilot are determined to be negligible. McCain monitors the presence of flame at the Biogas Flare through the use of a thermocouple.

1. Emission Limits and Streamlining

With the exception of SO₂, emission limits for the Biogas Flare have not previously been accounted for in their license. The emission limits listed below for other pollutants represent estimates of maximum potential emissions from the current flare configuration and do not denote any change in equipment or operation.

The biogas produced has the following properties:

- Heat Content = 630 Btu/dscf
- Density = 0.0652 lb_{biogas}/dscf
- Methane (CH₄) content = 60% by volume
- Hydrogen Sulfide (H₂S) content = 0.57%

Based on the flare heat input capacity and the heat content of the biogas, the maximum biogas flowrate to the flare is approximately 42,000 dscf/hr.

The BPT emission limits for the Biogas Flare for PM, NO_x, CO, and VOC were based on AP-42 emission factors for combustion of natural gas in Tables 1.4-1 and 1.4-2 dated 7/98. These emission factors are considered to be conservatively high.

BPT emission limits for SO₂ were based on a mass balance of sulfur in the system per the following equation:

$$\left(\frac{0.0652 \text{ lb}_{\text{biogas}}}{\text{dscf}}\right) \left(\frac{0.0057 \text{ lb}_{\text{H}_2\text{S}}}{\text{lb}_{\text{biogas}}}\right) \left(\frac{\text{dscf}}{630 \text{ Btu}}\right) \left(\frac{26.5 \times 10^6 \text{ Btu}}{\text{hr}}\right) \left(\frac{64 \text{ lb}_{\text{SO}_2}}{34 \text{ lb}_{\text{H}_2\text{S}}}\right) = 29.3 \text{ lb/hr}$$

Summary

For the Biogas Flare a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.2 grains/dscf	06-096 CMR 104	0.2 grains/dscf
	0.32 lb/hr	06-096 CMR 140, BPT	0.32 lb/hr
SO ₂	29.3 lb/hr	06-096 CMR 140, BPT (A-436-70-B-A)	29.3 lb/hr
NO _x	4.20 lb/hr	06-096 CMR 140, BPT	4.20 lb/hr
CO	3.53 lb/hr	06-096 CMR 140, BPT	3.53 lb/hr
VOC	0.23 lb/hr	06-096 CMR 140, BPT	0.23 lb/hr
Visible Emissions	30% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute block averages in a 3-hr period	06-096 CMR 101, §2(B)(1)(f)	20% opacity on a six (6) minute block average basis *
	20% opacity on a six (6) minute block average basis	06-096 CMR 140, BPT	

Table Notes: * streamlining requested

2. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Biogas Flare shall be demonstrated in accordance with the appropriate test methods upon request by the Department.

3. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Biogas Flare.

- a. Date, time, and duration of any downtime for the Biogas Flare.
- b. Standard cubic feet of biogas flared on a monthly and 12-month rolling total basis. The amount of biogas flared shall be calculated by summing the amount of biogas produced and subtracting the amount of biogas used by the boilers and Sludge Heater.
- c. Presence of flame at the Biogas Flare measured continuously. Any faults or alarms indicating pilot failure shall be recorded in a log including the date, time, reason, and action taken.

4. Parameter Monitors

There are no Parameter Monitors required for the Biogas Flare.

5. CEMS and COMS

There are no CEMS or COMS required for the Biogas Flare.

L. Digester

McCain processes their cull potatoes, screenings from the waste water treatment plant, and fried and frozen potato waste in an anaerobic digester to create biogas that can be burned in Boiler #8, Boiler #9, and the Sludge Heater. Any excess biogas is sent to the Biogas Flare. The digested potato waste is dewatered, the liquid stream sent to the waste water treatment plant, and the solids are spread on agricultural land.

At the waste water screening building, the waste is separated, fed through a grinder, and pumped to an adjacent acidification tank. The closed top acidification tank stores the material for less than a day. The material is then pumped to the 1.5 million gallon Digester for anaerobic digestion. The anaerobic digestion tank is operated under vacuum with an airtight cover. The biogas that is generated leaves the Digester through the roof of the tank. Blowers are used to pressurize the

biogas and transmit it to the boilers, Sludge Heater, or Biogas Flare. No biogas is ever intentionally vented in the process and no conditioning or processing of the biogas takes place.

1. Emission Limits

The Digester project was addressed in NSR license A-436-77-2-A. In order to be classified as a minor modification, McCain took a limit on actual facility-wide emissions increases from this project and must demonstrate that emissions as a result of the Digester project do not exceed the following in any 12-month period until after January 2022:

Pollutant	Tons/year
PM	24.9
PM ₁₀	14.9
PM _{2.5}	9.9
SO ₂	39.9
NO _x	39.9
CO	99.9
VOC	39.9
CO ₂ e	74900

Emissions increases from the Digester project include combustion emissions from biogas produced in the Digester.

Based on the maximum biogas output of the Digester and the short-term emissions limitations on the equipment the biogas is fired in, it is not physically possible for McCain to exceed the emissions listed above for the Digester project for any pollutant except for SO₂. Therefore, McCain shall only be required to maintain records of the 12-month rolling total SO₂ emissions from the Digester project.

McCain shall maintain records of the annual volume of biogas produced on a 12-month rolling total basis. McCain shall meter each source of biogas (the Digester and waste water treatment plant lagoon) separately as well as meter each boiler and the Sludge Heater individually for biogas use. The amount of biogas flared shall be calculated by subtracting the boiler and Sludge Heater usage from the total biogas generated.

Compliance with the annual SO₂ limit above shall be demonstrated on a 12-month rolling total basis by taking the total amount of biogas produced by the Digester and assuming that all hydrogen sulfide (H₂S) in the biogas is converted to SO₂ upon combustion.

2. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Digester.

- a. Standard cubic feet of biogas generated by the Digester on a monthly and 12-month rolling total basis.
- b. Actual emissions increases of SO₂ from the Digester project on a 12-month rolling total basis.

3. Parameter Monitors

There are no Parameter Monitors required for the Digester.

4. CEMS and COMS

There are no CEMS or COMS required for the Digester.

M. Fire Pump and Emergency Generator

McCain operates a Fire Pump used in emergencies only. The Fire Pump Engine was manufactured in 1999 by Detroit Diesel with a maximum heat input of 1.0 MMBtu/hr firing distillate fuel.

McCain also operates an Emergency Generator in the screening building at the waste water treatment plant. The Emergency Generator was manufactured in 2002 by Olympia with a maximum heat input of 1.6 MMBtu/hr firing distillate fuel.

1. New Source Performance Standards (NSPS)

The federal regulation 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, is applicable to distillate-fired engines which commenced construction after April 1, 2006. Both the Fire Pump Engine and the Emergency Generator were manufactured prior to this date. Therefore, Subpart IIII does not apply to these units.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to the Fire Pump Engine and Emergency Generator. These units are considered existing,

emergency stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements.

a. Emergency Definition:

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the following criteria:

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) Paragraph (1) above notwithstanding, the emergency stationary RICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
 - (i) Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (ii) Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

- (3) Paragraphs (1) and (2) above notwithstanding, emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, and periods of voltage deviation or low frequency, as provided in paragraph (2) above.

The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except provided in the following paragraphs:

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

The Fire Pump Engine and Emergency Generator shall be limited to the usage outlined in §63.6640(f) and therefore may be classified as existing emergency stationary RICE as defined in 40 CFR Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in §63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all the requirements for non-emergency engines.

b. 40 CFR Part 63, Subpart ZZZZ Requirements:

(1) Operation and Maintenance Requirements

	Operating Limitations* (40 CFR §63.6603(a) and Table 2(d))
Compression ignition units:	<ul style="list-style-type: none">- Change oil and filter every 500 hours of operation or annually, whichever comes first;- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The Fire Pump Engine and Emergency Generator shall be operated and maintained according to the manufacturer's emission-related written instructions or facility shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

(2) Optional Oil Analysis Program

McCain has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, McCain must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the Fire Pump Engine and Emergency Generator. [40 CFR §63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit For Maintenance and Testing

The Fire Pump Engine and Emergency Generator shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). [40 CFR §63.6640(f)]

(6) Recordkeeping

Facility shall keep records that include maintenance conducted on the generator(s) and the hours of operation of the/each engine(s) recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), McCain shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

(7) Requirements for Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake HP)

If McCain operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form

is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection
 U.S. Environmental Protection Agency
 5 Post Office Square, Suite 100
 Boston, MA 02109-3912

[40 CFR §63.6650(h)]

3. Emission Limits and Streamlining

For the Fire Pump Engine, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.31 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.31 lb/hr
PM ₁₀	0.31 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.31 lb/hr
SO ₂	0.0015% S (15 ppm) fuel	06-096 CMR 140, BPT	0.0015% S (15 ppm) fuel
NO _x	4.45 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	4.45 lb/hr
CO	0.96 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.96 lb/hr
VOC	0.36 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.36 lb/hr
Visible Emissions	30% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute block averages in a 3-hr period	06-096 CMR 101, §2(B)(1)(f)	30% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute block averages in a 3-hr period

Table Notes: % S = percent fuel sulfur, by weight

For the Emergency Generator, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.49 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.49 lb/hr
PM ₁₀	0.49 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.49 lb/hr
SO ₂	0.0015% S (15 ppm) fuel	06-096 CMR 140, BPT	0.0015% S (15 ppm) fuel
NO _x	7.01 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	7.01 lb/hr
CO	1.51 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	1.51 lb/hr
VOC	0.56 lb/hr	06-096 CMR 140, BPT (A-436-70-A-I)	0.56 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute block averages in a 3-hr period	06-096 CMR 101, §2(B)(1)(d)	20% opacity on a six (6) minute block average basis except for no more than two (2) six (6) minute block averages in a 3-hr period

Table Notes: % S = percent fuel sulfur, by weight

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Fire Pump Engine and Emergency Generator shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to the Fire Pump Engine and Emergency Generator.

5. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Fire Pump Engine and Emergency Generator.

- a. Hours of operating time on a calendar year total basis.
- b. Log of the reason for all operating time as it occurs.
- c. Sulfur content of distillate fuel fired based on fuel receipts from the supplier.

6. Parameter Monitors

There are no Parameter Monitors required for the Fire Pump Engine and Emergency Generator.

7. CEMS and COMS

There are no CEMS or COMS required for the Fire Pump Engine and Emergency Generator.

N. Dryers & Fryers

McCain currently operates two prime lines and a specialty line. Line 1 consists of Prime 1 Dryer and Prime 1 Fryer, each with a maximum production rate of approximately 30,000 lbs/hr.

The second prime line (Line 3) includes a Prime 2 Dryer and Prime 2 Fryer, each with a maximum production rate of approximately 45,000 lbs/hr.

Line 2 includes a fryer (Specialty Fryer) for production of specialty product with a maximum production rate of approximately 15,000 lbs/hr. There is no dryer associated with this fryer line.

It was determined in A-436-71-I-A that the organic emissions released from the vegetable oil fryers are not VOCs but rather condensable organic particulate emissions. This determination was based on USEPA policy memorandums and tests conducted by both the USEPA and Frito-Lay. As a result of this information, VOC emissions from the fryers are assumed to be negligible.

McCain operates an Energy Recovery System (ERS) on both the exhaust from the Prime 2 Fryer and the Specialty Fryer. Each ERS uses a heat exchanger to extract heat from the fryer exhaust after the rotoclones and before it is vented to atmosphere. The extracted heat is used in other areas of the potato processing plant. Operation of an ERS does not affect emissions from this equipment.

1. Control Equipment

Particulate matter is emitted from the dryers, but no control technologies are feasible for this equipment. Due to the high moisture content of the exhaust from these units and the high air flow, control of PM is considered technically and economically infeasible.

Particulate matter emissions from the fryers are controlled with wet centrifugal collector rotoclones (one rotoclone each for Prime 1 Fryer and Specialty Fryer and two rotoclones for the Prime 2 Fryer). Emissions from fryer operations were determined to be condensable organic and filterable particulate. The rotoclones are assumed to be approximately 62% efficient in controlling PM emissions.

2. Emission Limits and Streamlining

For the dryers and fryers a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Prime 1 Dryer			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	3.8 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	3.8 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period

Prime 2 Dryer			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	5.6 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	5.6 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period

Prime 1 Fryer			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	2.9 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	2.9 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period

Specialty Fryer			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	5.7 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	5.7 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period

Prime 2 Fryer			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	6.0 lb/hr	06-096 CMR 140, BPT (A-436-71-D-A)	6.0 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hr period

3. Emission Limit Compliance Methods

Compliance with the emission limits associated with the dryers and fryers shall be demonstrated in accordance with the appropriate test methods upon request by the Department.

4. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the fryers and dryers.

- a. Date, time, duration, and reason for all downtime for each rotoclone.
- b. Log detailing all maintenance and any malfunctions for each rotoclone.
- c. Records of monthly production (tons of finished product) for each fryer line.
- d. Records of monthly hours of operation for each fryer line.

5. Parameter Monitors

There are no Parameter Monitors required for the fryers and dryers.

6. CEMS and COMS

There are no CEMS or COMS required for the fryers and dryers.

O. Parts Washers

McCain operates various parts washers which are rented and not owned by the company. Each of these units have various unit capacities, with the sizes and number of units allowed to vary. McCain is responsible for ensuring these units comply with and are operated in accordance with 06-096 CMR 130.

P. Facility Annual Emissions

1. Total Annual Emissions

McCain is licensed for the following annual emissions, based on a 12 month rolling total. The tons per year limits were calculated based on the following:

- Firing Boiler #5 for 8760 hr/year on oil.
- Firing Boilers #8 and #9 for 8760 hr/year on oil.
- Facility-wide emissions of SO₂ from the combustion of biogas are calculated based on a maximum production of 320 million dscf/year from both the digester and treatment plant combined.
- Firing the Sludge Heater for 8760 hr/year on biogas.
- Flaring up to 240 million cubic feet of biogas per year.
- Operating each of the dryers and fryers for 8760 hr/year.
- Operating the Fire Pump Engine and Emergency Generator for 100 hr/year (each)

**Total Licensed Annual Emissions for the Facility
 Tons/year**

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #5	34.5	34.5	224.3	61.6	35.5	3.7
Boiler #8	17.3	17.3	110.0	31.0	17.8	1.9
Boiler #9	17.3	17.3	110.0	31.0	17.8	1.9
Sludge Heater	0.6	0.6	–	1.7	1.0	0.1
Biogas SO ₂	–	–	111.9	–	–	–
Biogas Flare	0.9	0.9	–	12.0	10.1	0.7
Prime 1 Dryer	16.6	16.6	–	–	–	–
Prime 2 Dryer	24.5	24.5	–	–	–	–
Prime 1 Fryer	12.7	12.7	–	–	–	–
Specialty Fryer	25.0	25.0	–	–	–	–
Prime 2 Fryer	26.3	26.3	–	–	–	–
Fire Pump Engine	–	–	–	0.2	0.1	–
Emergency Generator	–	–	–	0.4	0.1	–
Total TPY	175.7	175.7	556.2	136.2	82.4	8.3

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

The SO₂ numbers listed above are used to calculate the maximum emissions from the facility as a whole and do not necessarily represent the maximum SO₂ emissions from individual pieces of equipment. Maximum emissions of SO₂ from individual equipment are as follows:

Equipment	Max. SO ₂ Tons/year
Boiler #5	224.3
Boiler #8	170.8
Boiler #9	170.8
Sludge Heater	13.1
Biogas Flare	83.8

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 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), 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 greater than 100,000 tons per year, based on the following:

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

III. AMBIENT AIR QUALITY ANALYSIS

McCain previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-436-70-B-A issued on 4/13/06). An additional ambient air quality analysis is not required for this Part 70 License.

ORDER

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

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-436-70-D-R/A pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to McCain pursuant to the Department's preconstruction permitting requirements in 06-096 CMR 108 or 115 have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such, the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

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 STATEMENTS

- (1) 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 140]

- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [06-096 CMR 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 140]
- (4) 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 140]
- (5) Notwithstanding any other provision 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 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
 - A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
 - B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in their renewal application.

Source	Citation	Description	Basis for Determination
Fire Pump Engine, Emergency Generator, & Sludge Heater	06-096 CMR 103	Fuel Burning Equipment Particulate Emission Standard	Each unit is < 3.0 MMBtu/hr
Facility	06-096 CMR 111	Petroleum Liquid Storage Vapor Control	No petroleum liquids stored in vessels with capacities > 39,000 gallons
Facility	06-096 CMR 118	Gasoline Dispensing Facilities	Facility does not dispense gasoline
Facility	06-096 CMR 134	VOC RACT	Non-exempt equipment emits less than 40 tpy.
Fire Pump Engine & Emergency Generator	06-096 CMR 148	Emissions from Smaller-Scale Electric Generating Resources	These engines are subject to new source review requirements.
Boilers #5, #8, & #9	40 CFR 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	Maximum heat input for each boiler less than 250 MMBtu/hr
Boilers #5, #8, & #9	40 CFR 60, Subpart Da	NSPS for Electrical Steam Generating Units	These boilers do not produce electricity
Boilers #5, #8, & #9	40 CFR 60, Subpart Db	NSPS for Industrial-Commercial-Institutional Steam Generating Units	Maximum heat input for each boiler less than 100 MMBtu/hr
Boilers #5, #8, #9, & Biogas Flare	40 CFR 60, Subpart E	NSPS for Incinerators	The boilers and flare do not burn solid waste
Fire Pump Engine & Emergency Generator	40 CFR Part 60, Subpart IIII	NSPS for Compression Ignition Internal Combustion Engines	These units were manufactured and installed prior to 2005.
Fuel Storage Tanks	40 CFR Part 60, Subparts K & Ka	NSPS for Storage Vessels of Petroleum Liquids	Tank capacities are < 40,000 gallons
Fuel Storage Tanks	40 CFR Part 60, Subparts Kb	NSPS for Volatile Organic Liquid Storage Vessels	Tank capacities are < 151 m ³ and store liquids with a vapor pressure < 15.0 kPa
Boilers #5, #8, & #9	40 CFR Part 63, Subpart DDDDD	NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters	Facility is not a major source of HAP.

[06-096 CMR 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 CMR 140;
 - B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
 - C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
 - D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 CMR 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.
[06-096 CMR 140]

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 and this license (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 140. [06-096 CMR 140]
- (3) 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 140]
Enforceable by State-only
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. §353-A.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 140]
Enforceable by State-only
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 CMR 140]
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, 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 the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 CMR 140]
- (8) 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 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;

2. to demonstrate compliance with the applicable emission standards; or
3. 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 140]

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates 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 140]

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures,

downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- C. All other deviations shall be reported to the Department in the facility's semiannual report.
[06-096 CMR 140]
- (11) Upon the written request of 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 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 140]
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 CMR 140]
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

- A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
- B. The compliance status;
- C. Whether compliance was continuous or intermittent;
- D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- E. Such other facts as the Department may require to determine the compliance status of the source.

[06-096 CMR 140]

SPECIFIC CONDITIONS

(14) Boiler #5

A. Allowable Fuels

1. Boiler #5 is licensed to fire distillate fuel and natural gas. [06-096 CMR 140, BPT (A-436-77-3-M) & (A-436-77-4-M)]
2. McCain shall be allowed burn in Boiler #5 reclaimed vegetable oil produced on-site. [06-096 CMR 140, BPT (A-436-70-A-I)]
3. McCain shall be allowed to burn specification waste oil in Boiler #5. Only waste oil generated on-site and meeting the criteria of "specification waste oil" (as defined by the Bureau of Remediation and Waste Management) shall be fired in Boiler #5. McCain shall maintain records of a representative sample of the waste oil utilized demonstrating that the waste oil meets the allowable levels for the constituents and properties in accordance with 06-096 CMR 860 (as amended).
[06-096 CMR 140, BPT (A-436-70-A-I)]

B. Fuel Sulfur Content

1. Prior to July 1, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight).
[40 CFR 60.42c(d)]
2. Beginning July 1, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm).
[06-096 CMR 106, §3(A)(2)(a)].
3. Beginning January 1, 2018 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm).
[06-096 CMR 106, §3(A)(2)(b)]

C. Boiler #5 Emission Limits

1. Emissions from Boiler #5 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.08	06-096 CMR 103, §2(B)(1)(b)	Federally Enforceable
NO _x	0.14	06-096 CMR 140, BPT (A-436-77-5-A)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	7.9	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
	4.9 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
PM ₁₀	7.9	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
	4.9 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
SO ₂	51.2	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
	0.1 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
NO _x	14.1	06-096 CMR 140, BPT (A-436-77-5-A)	Federally Enforceable
	3.1 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
CO	8.1	06-096 CMR 140, BPT (A-436-77-3-M & A-436-77-5-A)	Federally Enforceable
VOC	0.84	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
	0.5 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable

2. When firing only natural gas, visible emissions from Boiler #5 shall not exceed 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101, §2(B)(1)(c)]

3. When firing any fuel other than natural gas, visible emissions from Boiler #5 shall not exceed 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity. [40 CFR 60.43c(c)]

D. McCain shall operate and maintain Low NO_x Burners and Flue Gas Recirculation on Boiler #5 to meet the NO_x emission limits for this unit. [06-096 CMR 138 and 06-096 CMR 140, BPT]

E. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for Boiler #5 and its associated air pollution control equipment:

1. Gallons of distillate fuel fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
2. Gallons of specification waste oil fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
3. Gallons of vegetable oil fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
4. Standard cubic feet of natural gas fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
5. Sulfur content of distillate fuel fired based on fuel supplier certification. [40 CFR 60.46c(e) and 60.48c(f)]
6. Records of a representative sample of waste oil demonstrating it meets the requirements to be considered specification waste oil. [06-096 CMR 140, BPT (A-436-70-A-I)]
7. Position (open or closed) of the FGR damper, observed and recorded once per day whenever Boiler #5 is in operation. This monitoring requirement is included in McCain's CAM plan. [06-096 CMR 140, BPT and 40 CFR Part 64]

F. 40 CFR Part 60 Subpart Dc

For Boiler #5, McCain shall meet all applicable requirements in 40 CFR Part 60, Subpart Dc including, but not limited to the following:

1. McCain shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each 6-month period. [40 CFR 60.48c(e)]

2. The following address for EPA shall be used for any reports or notifications required to be copied to them:

Compliance Clerk
USEPA Region 1
5 Post Office Sq. Suite 100
Boston, MA 02109-3912

(15) **Boilers #8 & #9**

A. Allowable Fuels

1. Boilers #8 & #9 are licensed to fire distillate fuel, natural gas, and biogas. [06-096 CMR 140, BPT (A-436-70-B-A), (A-436-77-2-A), (A-436-77-3-M) & (A-436-77-4-M)]
2. McCain shall be allowed to burn in Boilers #8 & #9 reclaimed vegetable oil produced on-site. [06-096 CMR 140, BPT]
3. McCain shall be allowed to burn specification waste oil in Boilers #8 & #9. Only waste oil generated on-site and meeting the criteria of "specification waste oil" (as defined by the Bureau of Remediation and Waste Management) shall be fired in Boilers #8 & #9. McCain shall maintain records of a representative sample of the waste oil utilized demonstrating that the waste oil meets the allowable levels for the constituents and properties in accordance with 06-096 CMR 860 (as amended). [06-096 CMR 140, BPT]

B. Fuel Sulfur Content

1. Prior to July 1, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). [40 CFR 60.42c(d)]
2. Beginning July 1, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm). [06-096 CMR 106, §3(A)(2)(a)].
3. Beginning January 1, 2018 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [06-096 CMR 106, §3(A)(2)(b)]

C. Boilers #8 & #9 Emission Limits

1. Emissions from Boilers #8 & #9 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.08	06-096 CMR 103, §2(B)(1)(b)	Federally Enforceable
NO _x	0.14	06-096 CMR 140, BPT (A-436-77-5-A)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	4.0	06-096 CMR 140, BPT (A-436-70-B-A)	Federally Enforceable
	2.5 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
PM ₁₀	4.0	06-096 CMR 140, BPT (A-436-70-B-A)	Federally Enforceable
	2.5 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
SO ₂	48.9	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable
	0.1 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
NO _x	7.1	06-096 CMR 140, BPT (A-436-77-5-A)	Federally Enforceable
	1.6 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable
CO	4.1	06-096 CMR 140, BPT (A-436-77-3-M & A-436-77-5-A)	Federally Enforceable
VOC	0.40	06-096 CMR 140, BPT (A-436-70-B-A)	Federally Enforceable
	0.3 (when firing only natural gas)	06-096 CMR 140, BPT (A-436-77-3-M)	Federally Enforceable

2. When firing only natural gas, visible emissions from Boilers #8 & #9 shall each not exceed 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101, §2(B)(1)(c)]

3. When firing any fuel other than natural gas, visible emissions from Boilers #8 & #9 shall each not exceed 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity. [40 CFR 60.42c(c) & 06-096 CMR 140, BPT (A-436-77-5-A)]
- D. McCain shall operate and maintain Low NO_x Burners and Flue Gas Recirculation on Boilers #8 & #9 to meet the NO_x emission limits for these units. [06-096 CMR 138 and 06-096 CMR 140, BPT]
- E. McCain shall perform annual tune-ups on Boilers #8 & #9 and maintain records in accordance with 06-096 CMR 138. [06-096 CMR 138, §3(L)]
- F. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for Boilers #8 & #9 and their associated air pollution control equipment:

1. Gallons of distillate fuel fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
2. Gallons of specification waste oil fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
3. Gallons of vegetable oil fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
4. Standard cubic feet of natural gas fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
5. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT and 40 CFR 60.48c(g)(2)]
6. Sulfur content of distillate fuel fired based on fuel supplier certification. [40 CFR 60.46c(e) and 60.48c(f)]
7. Records of a representative sample of waste oil demonstrating it meets the requirements to be considered specification waste oil. [06-096 CMR 140, BPT (A-436-70-A-I)]
8. Daily hours of operation for each boiler. [06-096 CMR 140, BPT (A-436-70-B-A)]
9. Position (open or closed) of each FGR damper, observed and recorded once per day whenever Boilers #8 & #9 are in operation. This monitoring requirement is included in McCain's CAM plan. [06-096 CMR 140, BPT and 40 CFR Part 64]
10. Status (operating or not) of each FGR blower, observed and recorded once per day whenever Boilers #8 & #9 are in operation. This monitoring requirement is included in McCain's CAM plan. [06-096 CMR 140, BPT and 40 CFR Part 64]

G. 40 CFR Part 60 Subpart Dc

For Boilers #8 & #9, McCain shall meet all applicable requirements in 40 CFR Part 60, Subpart Dc including, but not limited to the following:

1. McCain shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period, each 30-day average sulfur content calculated during the reporting period (for #6 fuel oil), and records of fuel supplier certifications (for distillate fuel). The semi-annual reports are due within 30 days of the end of each 6-month period. [40 CFR 60.48c(e)]
2. The following address for EPA shall be used for any reports or notifications required to be copied to them:

Compliance Clerk
USEPA Region 1
5 Post Office Sq. Suite 100
Boston, MA 02109-3912

(16) **40 CFR Part 63 Subpart JJJJJJ Requirements for Boilers #5, #8, and #9**

- A. McCain shall submit an Initial Notification submittal to EPA in accordance with 40 CFR Part 63.11225(a)(2).
- B. The facility shall implement a boiler tune-up program to include the initial tune-up of applicable boilers. [40 CFR Part 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. See chart below:

Boiler Category	Tune-Up Frequency
Existing Oil fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years
<i>Boilers with less frequent tune up requirements</i>	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
With a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR Part 63.11223(a) and Table 2]

2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured at high fire or typical operating load, before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]
- C. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
1. 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; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
 2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
 3. 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; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
 5. 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 CFR Part 63.11223(b)(5)]
 6. 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 CFR Part 63.11223(b)(7)]

- D. After conducting the initial boiler tune-up, a Notification of Compliance Status was to be submitted to EPA. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- E. Energy Assessment
1. A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers. [40 CFR Part 63.11196(a)(3)]
 2. The energy assessment was required to include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR 63, Table 2(4)]
 3. A Notification of Compliance Status was required to be submitted to EPA. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]
- F. 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 notifications and reports with supporting compliance documentation; 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. Records shall be in a form suitable and readily available for expeditious review.

(17) **Sludge Heater**

- A. The Sludge Heater is licensed to fire propane and biogas. [06-096 CMR 140, BPT (A-436-77-2-A)]

B. Sludge Heater Emission Limits

1. Emissions from the Sludge Heater shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.1	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable
PM ₁₀	0.1	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable
SO ₂	3.0	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable
NO _x	0.4	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable
CO	0.3	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable
VOC	0.1	06-096 CMR 140, BPT (A-436-77-2-A)	Federally Enforceable

2. When firing propane, visible emissions from the Sludge Heater shall not exceed 10% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101, §2(B)(1)(c) and 06-096 CMR 140, BPT]
3. When firing biogas, visible emissions from the Sludge Heater shall not exceed 20% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 140, BPT (A-436-77-2-A)]

C. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Sludge Heater:

1. Gallons of propane fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT]
2. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT]

(18) **Biogas Flare**

- A. McCain is licensed to operate a biogas flare with a heat input capacity of 26.5 MMBtu/hr. [06-096 CMR 140, BPT (A-436-70-B-A)]
- B. McCain is licensed to burn propane as a continuous pilot light for the Biogas Flare. [06-096 CMR 140, BPT]
- C. McCain is limited to an annual total of flaring and/or combusting 240 million cubic feet of biogas. [06-096 CMR 140, BPT (A-436-70-B-A)]
- D. Biogas Flare Limits

1. Emissions from the Biogas Flare shall not exceed the following limits:

Pollutant	grains/dscf	Origin and Authority	Enforceability
PM	0.2	06-096 CMR 104	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.32	06-096 CMR 140, BPT	Enforceable by State-only
SO ₂	29.3	06-096 CMR 140, BPT (A-436-70-B-A)	Federally Enforceable
NO _x	4.20	06-096 CMR 140, BPT	Enforceable by State-only
CO	3.53	06-096 CMR 140, BPT	Enforceable by State-only
VOC	0.23	06-096 CMR 140, BPT	Enforceable by State-only

- 2. Visible emissions from the Biogas Flare shall not exceed 20% opacity on a six (6) minute block average basis. [06-096 CMR 140, BPT]

E. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Biogas Flare:

- 1. Date, time, and duration of any downtime for the Biogas Flare. [06-096 CMR 140, BPT]
- 2. Standard cubic feet of biogas flared on a monthly and 12-month rolling total basis. The amount flared shall be calculated by summing the amount

of biogas produced and subtracting the amount used by the boilers and Sludge Heater. [06-096 CMR 140, BPT (A-436-77-2-A)]

3. Presence of flame at the Biogas Flare measured continuously. Any faults or alarms indicating pilot failure shall be recorded in a log including the date, time, reason, and action taken. [06-096 CMR 140, BPT]

(19) **Digester**

- A. As a result of the digester project, McCain shall not exceed the following actual emissions increases on a 12-month rolling total basis until after January 2022:

Pollutant	Tons/year
SO ₂	39.9

[06-096 CMR 140, BPT (A-436-77-5-A)]

- B. Emissions increases from the Digester project shall include combustion emissions from biogas produced in the Digester..

[06-096 CMR 140, BPT (A-436-77-5-A)]

- C. Compliance with the annual limit above shall be demonstrated on a 12-month rolling total basis by taking the total amount of biogas produced by the Digester and assuming all H₂S in the biogas is converted to SO₂ upon combustion. [06-096 CMR 140, BPT (A-436-77-5-A)]

- D. McCain shall meter each source of biogas (the Digester and waste water treatment plant lagoon) separately as well as meter each boiler and the Sludge Heater individually for biogas use. The amount of biogas flared shall be calculated by subtracting the boiler and Sludge Heater usage from the total biogas generated. [06-096 CMR 140, BPT (A-436-77-5-A)]

- E. McCain shall flare all biogas not otherwise combusted by the boilers and the Sludge Heater. The dewatered sludge shall be handled in accordance with Maine DEP Bureau of Remediation and Solid Waste requirements. The Department is not precluded from requiring additional controls should it be deemed necessary to control odor. [06-096 CMR 140, BPT (A-436-77-2-A)]

F. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Digester:

1. Standard cubic feet of biogas generated by the Digester on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT]
2. Actual emissions increases of SO₂ from the Digester project on a 12-month rolling total basis. [06-096 CMR 140, BPT (A-436-77-5-A)]

(20) **Fire Pump Engine and Emergency Generator**

A. Allowable Operation and Fuels

1. The Fire Pump Engine and Emergency Generator are licensed to fire distillate fuel. [06-096 CMR 140, BPT (A-436-70-A-I)]
2. The Fire Pump Engine and Emergency Generator are each limited to 100 hours per year total operation, based on a calendar year, excluding operating hours during emergency situations. [06-096 CMR 140, BPT]

B. Fuel Sulfur Content

1. The distillate fuel fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [06-096 CMR 106, §3(A)(2)(b)]
2. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 140, BPT (A-436-70-A-I)]

C. Emissions from the Fire Pump Engine shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.31	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
PM ₁₀	0.31	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
NO _x	4.45	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
CO	0.96	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
VOC	0.36	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable

D. Emissions from the Emergency Generator shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.49	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
PM ₁₀	0.49	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
NO _x	7.01	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
CO	1.51	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable
VOC	0.56	06-096 CMR 140, BPT (A-436-70-A-I)	Federally Enforceable

E. Visible Emissions

1. Visible emissions the Fire Pump Engine shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101, §2(B)(1)(f)]
2. Visible emissions from the Emergency Generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101, §2(B)(1)(d)]

F. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Fire Pump Engine and Emergency Generator:

1. Hours of operating time on a calendar year total basis. [06-096 CMR 140, BPT]
2. Log of the reason for all operating time as it occurs. [06-096 CMR 140, BPT]
3. Sulfur content of distillate fuel fired based on fuel receipts from the supplier. [06-096 CMR 140, BPT (A-436-70-A-I)]

G. The Fire Pump Engine and Emergency Generator shall each meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. McCain shall meet the following operational limitations for the Fire Pump Engine and Emergency Generator:
 - a. Change the oil and filter annually,
 - b. Inspect the air cleaner annually, and
 - c. Inspect the hoses and belts annually and replace as necessary.

A log shall be maintained documenting compliance with the operational limitations.

[40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 115]

2. Oil Analysis Program Option
McCain has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, McCain must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
3. Non-Resettable Hour Meter
A non-resettable hour meter shall be installed and operated on the Fire Pump Engine and Emergency Generator. [40 CFR §63.6625(f)]
4. Maintenance, Testing, and Non-Emergency Operating Situations
 - a. The Fire Pump Engine and Emergency Generator shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). These limits are based on a calendar year. Compliance shall be demonstrated by a written log of all generator operating hours.
[40 CFR §63.6640(f) and 06-096 CMR 115]

b. McCain shall keep records that include maintenance conducted on the Fire Pump Engine and Emergency Generator and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the McCain must keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes.
[40 CFR §63.6655(e) and (f)]

5. Operation and Maintenance

The Fire Pump Engine and Emergency Generator shall be operated and maintained according to the manufacturer's emission-related written instructions, or McCain shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

6. Startup Idle and Startup Time Minimization

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

7. Requirements for Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake hp)

If McCain operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange

(CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

(21) **Dryers & Fryers**

A. Emission Limits

1. Emissions shall not exceed the following limits:

Unit	PM (lb/hr)	Origin and Authority	Enforceability
Prime 1 Dryer	3.8	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
Prime 2 Dryer	5.6	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
Prime 1 Fryer	2.9	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
Specialty Fryer	5.7	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable
Prime 2 Fryer	6.0	06-096 CMR 140, BPT (A-436-71-D-A)	Federally Enforceable

2. Visible emissions from each dryer and fryer shall not exceed 20% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101, §2(B)(3)(d)]

B. McCain shall operate and maintain, in good working order and in accordance with manufacturer's specifications, the wet centrifugal collector rotoclones on each fryer. The rotoclones shall be operated at all times the fryers are in use. [06-096 CMR 140, BPT (A-436-72-A-R)]

C. Prime 2 Fryer shall exhaust through two stacks that are each at least 54 feet above ground level. [06-096 CMR 140, BPT (A-436-70-A-I)]

D. Periodic Monitoring

McCain shall monitor and record the following periodic monitors for the Dryers and Fryers and their associated air pollution control equipment:

1. Date, time, duration, and reason for all downtime for each rotoclone. [06-096 CMR 140, BPT (A-436-70-A-I)]
2. Log detailing all maintenance and any malfunctions for each rotoclone. [06-096 CMR 140, BPT (A-436-70-A-I)]
3. Records of monthly production (tons of finished product) for each fryer line. [06-096 CMR 140, BPT (A-436-70-A-I)]
4. Records of monthly hours of operation for each fryer line. [06-096 CMR 140, BPT (A-436-70-A-I)]

(22) **Parts Washer**

Parts washers at McCain are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

- A. McCain shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 2. Wipe cleaning; and,
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 CMR 130.
 1. McCain shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.

- f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the degreaser unit.
 - i. The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

(23) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(24) General Process Sources

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(25) Compliance Assurance Monitoring (CAM) – General Requirements

- A. The licensee shall operate and monitor all emission units and their associated control equipment in accordance with the approved CAM Plan. [40 CFR Part 64]
- B. Any excursion shall be reported in semiannual reports. If excursions occur, the licensee must also certify intermittent compliance with the emission limits for the control device monitored in the annual compliance certification. [40 CFR Part 64]
- C. Upon detecting an excursion, the licensee shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7(d)]
- D. Prior to making any changes to the approved CAM plan, the licensee shall notify the Department and, if necessary, submit a proposed license modification application to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring

and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)]

- E. Any change of the target level shall be submitted in a letter to the Department for written approval. [06-096 CMR 140, BPT]

(26) Semiannual Reporting [06-096 CMR 140]

- A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic and CAM monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(27) Annual Compliance Certification

McCain shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31 of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 CMR 140]

(28) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- A. A computer program and accompanying instructions supplied by the Department; or
- B. A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted by the date as specified in 06-096 CMR 137.

[06-096 CMR 137]

(29) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
06-096 CMR 102	Open Burning	-
06-096 CMR 109	Emergency Episode Regulation	-
06-096 CMR 110	Ambient Air Quality Standard	-
06-096 CMR 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(30) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs.

[40 CFR, Part 82, Subpart F]

(31) **Asbestos Abatement**

When undertaking Asbestos abatement activities, McCain shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(32) **Expiration of a Part 70 license**

- A. McCain shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18 months prior, to the expiration of this air license.
- B. Pursuant to Title 5 MRSA §10002, and 06-096 CMR 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70

McCain Foods USA, Inc.
Aroostook County
Easton, Maine
A-436-70-D-R/A

67

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal with Amendment

license. An existing source submitting a complete renewal application under 06-096 CMR 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

(33) **New Source Review**

McCain is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emissions license and the NSR requirements remain in effect even if this 06-096 CMR 140 Air Emissions License, A-436-70-D-R/A, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 29 DAY OF May, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PATRICIA W. AHO, COMMISSIONER

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

[Note: If a complete renewal application as determined by the Department, is submitted at least 6 months prior to expiration but no earlier than 18 months, then pursuant to Title 5 MRSA §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the renewal of the Part 70 license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/22/09

Date of application acceptance: 6/5/09

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

