STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

McCain Foods USA, Inc. **Aroostook County** **Easton, Maine** **A-436-70-I-R**	**Departmental** **Findings of Fact and Order** **Part 70 Air Emission License** **Renewal**

FINDINGS OF FACT

After review of the Part 70 License 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 (M.R.S.) § 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
NAICS CODES	311411
NATURE OF BUSINESS	Frozen Potato Products
FACILITY LOCATION	Richardson Rd, Easton, Maine

McCain is a potato processing facility consisting of three boilers, a sludge heater, a biogas flare, an anaerobic digester, three hot oil fryers with two associated dryers, a fire pump, and an emergency engine.

McCain has the potential to emit more than 100 tons per year (tpy) of particulate matter (PM), sulfur dioxide (SO_2), and nitrogen oxides (NO_x); and more than 100,000 tons of carbon dioxide equivalent (CO_2e). Therefore, the source is classified as 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 classified as an area source for HAP.

B. Emission Equipment

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

Boilers

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate	Fuel Type, % sulfur	Manufacture Date	Install Date	Stack #
Boiler #5	98.5	704 gal/hr	distillate fuel, 0.0015% spec. waste oil, 0.5% vegetable oil	1998	1999	5
		96,568 scf/hr	natural gas, neg.			
Boiler #8	49.53	354 gal/hr	distillate fuel, 0.0015% spec. waste oil, 0.5% vegetable oil	2005	2006	17
		48,529 scf/hr	natural gas, neg.			
		60,000 scf/hr	biogas			
Boiler #9	49.53	354 gal/hr	distillate fuel, 0.0015% spec. waste oil, 0.5% vegetable oil	2005	2006	18
		48,529 scf/hr	natural gas, neg.			
		60,000 scf/hr	biogas			
Sludge Heater	2.66	21.9 gal/hr	propane, neg	2012	2012	20
		4,222 scf/hr	biogas			
Biogas Flare	26.5	0.6 gal/hr	propane, neg.	1998	1999	N/A
		42,000 scf/hr	biogas			

Engines

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output	Fuel Type, % sulfur	Mfr. Date	Install. Date
Fire Pump	1.0	7.4	135 HP	distillate fuel, 0.0015%	1999	1999
Emergency Generator	1.6	11.7	150 kW	distillate fuel, 0.0015%	2002	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 C.M.R. ch. 140.

C. Acronyms and Units of Measure

BACT	Best Available Control Technology
BPT	Best Practical Treatment
C.F.R.	Code of Federal Regulations
C.M.R.	Code of Maine Rules
CAM	Compliance Assurance Monitoring
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
EPA or US EPA	United States Environmental Protection Agency
gal/hr	gallon per hour
GHG	Greenhouse Gases
gr/dscf	grains per dry standard cubic feet
HAP	Hazardous Air Pollutants

lb	pound
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
M.R.S.	Maine Revised Statutes
MMBtu	Million British Thermal Units
MMBtu/hr	million British Thermal Units per hour
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSR	New Source Review
PM	Particulate Matter less than 100 microns in diameter
PM_{10}	Particulate Matter less than 10 microns in diameter
SO_2	Sulfur Dioxide
ton/hr	ton per hour
tpy	ton per year
VOC	Volatile Organic Compounds

D. Definitions

Distillate Fuel means the following:

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

Specification Waste Oil means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- It has sufficient liquid content to be free flowing;
- It meets all of the constituent and property standards as specified in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- It does not otherwise exhibit hazardous waste characteristics; and
- It has not been mixed with a hazardous waste.

Portable Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive

months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

E. Application Classification

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

The application for McCain does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is considered to be a Part 70 License renewal issued under *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

F. 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.

G. 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 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 110	Ambient Air Quality Standards
06-096 C.M.R. ch. 130	Solvent Cleaners
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 143	New Source Performance Standards
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63, Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
40 C.F.R. Part 70	State Operating Permit Programs
40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting

Note: C.M.R. = Code of Maine Regulations
C.F.R. = Code of Federal Regulations

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 *Definitions Regulation*, 06-096 C.M.R. ch. 100. 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 C.M.R. ch. 138 (NO_x RACT) is applicable to sources that have the potential to emit quantities of NO_X equal to or greater than 100 tons/year. McCain's potential to emit NO_x from equipment constructed after the applicability date in chapter 138 is less than 100 tons/year. Therefore, 06-096 C.M.R. ch. 138 is not applicable to this source.

C. **VOC RACT (Reasonably Available Control Technology)**

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

D. **Mandatory Greenhouse Gas (GHG) Reporting**

Federal regulation *Mandatory Greenhouse Gas Reporting,* 40 C.F.R. Part 98, 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 *General Provisions, Who must report?,* 40 C.F.R. § 98.2.

(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 CO_2e 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 CO_2e 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 C.F.R. Part 98, Subpart II and found in Table A-4 of Subpart A, and thus is subject under (a)(2) above.

McCain shall fulfill the recordkeeping and reporting requirements of 40 C.F.R. Part 98.

E. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring, 40 C.F.R. Part 64 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% of the major source threshold (50 tons/year for VOC and 100 tpy for any other criteria pollutant).

This regulation's 40 C.F.R. § 64.2(b)(1)(vi) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards for which a Part 70 air emission license specifies a continuous compliance determination method. Furthermore, 40 C.F.R. § 64.2(b)(1)(i) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards in a NSPS or NESHAP regulation proposed by the Administrator after November 15, 1990. [40 C.F.R. Part 64 § 64.2(b)]

McCain submitted a CAM plan for NO_x from Boilers #5, #8, and #9 in Amendment A-436-70-B-A on 4/13/2006. However, with the elimination of #6 fuel oil in License A-436-70-D-R/A on 5/29/2015, the pre-control emissions from each boiler was lowered to below the 100 ton/yr applicability limit. CAM requirements were subsequently removed in Amendment A-436-70-F-A on 1/17/2017.

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.

F. Fuel Sulfur Content Requirements

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

G. Boilers #5, #8, and #9

Boiler #5 was installed in 1999. Boiler #5 was designed with a heat input capacity of 98.5 MMBtu/hr and may combust natural gas, distillate fuel with a maximum sulfur content of 0.0015% by weight, specification waste oil with a maximum sulfur content of 0.5% by weight, and vegetable oil. Boiler #5 is operated to provide steam and heat.

Boilers #8 & #9 are each a Nebraska Boiler installed in 2006. Boilers #8 & #9 were designed with a heat input capacity of 49.53 MMBtu/hr each and may combust distillate fuel with a maximum sulfur content of 0.0015% by weight, specification waste oil, vegetable oil, natural gas, and biogas from McCain's digester and wastewater treatment plant.

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 #8 or #9 at any time is 37.8 MMBtu/hr. The SO_2 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 fuel.

Emissions from Boiler #5 exit through Stack #5, which has an inside diameter of 3.75 feet and above ground level (AGL) height of 110 feet. Emissions from Boilers #8 and #9 exit through Stack #17 and Stack #18 respectively, both of which have an inside diameter of 36 inches and AGL height of 90 feet.

1. Control Equipment

   Boiler #5 is equipped with low NO_x burners and flue gas recirculation (FGR) for control of NO_x emissions.

   Boilers #8 and #9 are equipped with low NO_x burners and flue gas recirculation (FGR) for control of NO_x emissions. For Boilers #8 and #9, 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.

2. New Source Performance Standards (NSPS)

   Boilers #5, #8, and #9 are subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc. These standards apply to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

   Specific requirements of subpart Dc are addressed in the following sections.

3. 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 C.F.R. Part 63, Subpart JJJJJJ). However, boilers which fire fuel oil are not. McCain wishes to maintain the ability to fire oil in Boilers #5, #8, and #9 beyond what is provided for in the definition of "gas-fired boiler". Therefore, Boilers #5, #8, and #9 are subject to the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ and are considered as existing oil boilers.

   The requirements of subpart JJJJJJ are addressed in the following sections.

4. Emission Limits and Streamlining

   a. Criteria Pollutants

      For Boilers #5, #8, and #9 a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Boiler #5

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 103, §2(B)(1)(b)	0.08 lb/MMBtu
	7.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	7.9 lb/hr
	4.9 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	4.9 lb/hr (when firing only natural gas)

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM_{10}	7.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	7.9 lb/hr
	4.9 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	4.9 lb/hr (when firing only natural gas)
SO_2	51.2 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	51.2 lb/hr
	0.1 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	0.1 lb/hr (when firing only natural gas)
NO_x	0.14 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	0.14 lb/MMBtu
	14.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	14.1 lb/hr
	3.1 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 140, BPT (A-436-77-3-M, 4/6/2012)	3.1 lb/hr (when firing only natural gas)
CO	8.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012 & A-436-77-5-A,4/24/2015)	8.1 lb/hr
VOC	0.84 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	0.84 lb/hr
	0.5 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	0.5 lb/hr (when firing only natural gas)

Boilers #8 and #9

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits (each)
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 103, §2(B)(1)(b)	0.08 lb/MMBtu
	4.0 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)	4.0 lb/hr
	2.5 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	2.5 lb/hr (when firing only natural gas)
PM_{10}	4.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-70-B-A, 4/13/2006)	4.0 lb/hr
	2.5 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	2.5 lb/hr (when firing only natural gas)

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits (each)
SO_2	48.9 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	48.9 lb/hr
	0.1 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	0.1 lb/hr (when firing only natural gas)
NO_x	0.14 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	0.14 lb/MMBtu
	7.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	7.1 lb/hr
	1.6 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	1.6 lb/hr (when firing only natural gas)
CO	4.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012 & A-436-77-5-A, 4/24/2015)	4.1 lb/hr
VOC	0.40 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)	0.40 lb/hr
	0.3 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	0.3 lb/hr (when firing only natural gas)

b. Visible Emissions

When firing natural gas only, visible emissions from Boilers #5, #8, and #9 shall not exceed 10% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

In all other operating conditions other that firing solely natural gas, the visible emissions standards of 40 C.F.R. Part 60, Subpart Dc are applicable, and satisfy the exemption covered in 06-096 C.M.R. ch. 101 (1)(C)(7). The visible emissions standards of Subpart Dc are addressed in the following sections.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boilers #5, #8 and #9 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 7	As requested
	lb/hr		
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	In accordance with 40 C.F.R. 60.47c

6. Compliance Assurance Monitoring

   CAM is not applicable to Boilers #5, #8, and #9.

7. Periodic Monitoring

   McCain shall operate, record data, and maintain records from the following values for Boilers #5, #8, and #9.

   a. Gallons of distillate fuel fired on a monthly and 12-month rolling total basis. [40 C.F.R. § 60.48c(g)(2) (A-436-77-4-M, 8/22/2012, BPT)]

   b. Gallons of specification waste oil fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)]

   c. Gallons of vegetable oil fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT and 40 C.F.R. § 60.48c(g)(2) (A-436-70-A-I, 12/2/2004)]

   d. Standard cubic feet of natural gas fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT and 40 C.F.R. § 60.48c(g)(2) (A-436-77-3-M, 4/6/2012)]

   e. Sulfur content of distillate fuel fired based on fuel supplier certification. [40 C.F.R. §§ 60.46c(e) and 60.48c(f) (A-436-70-A-I, 12/2/2004)]

f. Records of a representative sample of waste oil demonstrating it meets the requirements to be considered specification waste oil. [06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)]

g. Records of opacity performance tests.
[40 C.F.R. Part 60, Subpart Dc (A-436-70-G-A, 2/7/2018)]

McCain shall operate, record data, and maintain records from the following values for Boilers #8, and #9 only.

h. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT and 40 C.F.R. § 60.48c(g)(2) (A-436-77-5-A, 4/24/2015)]

i. Daily hours of operation for each boiler.
[06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)]

8. Parameter Monitors

There are no Parameter Monitors required for Boilers #5, #8, and #9.

9. CEMS and COMS

There are no CEMS or COMS required for Boilers #5, #8, and #9.

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

Due to their size and year of manufacture, Boilers #5, #8, and #9 are subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

McCain shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #5, #8, and #9 including, but not limited to, the following:

1. Notifications

McCain submitted notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up. This was submitted for Boiler #5 on 6/23/99, and for Boilers #8 and #9 on 5/4/06. [40 C.F.R. § 60.48c(a)]

2. Standards

a. Sulfur Dioxide (SO_2)

The fuel oil fired in Boilers #5, #8, and #9 shall not exceed 0.5% sulfur by weight. [40 C.F.R. § 60.42c(d)] This fuel sulfur content limit shall be streamlined to the lower limit required by State statute.

Biogas is not intended as a fuel subject to the requirements specified in Subpart Dc. The intent of the SO_2 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.

b. Particulate Matter (PM)

Subpart Dc contains more stringent particulate matter (PM) emission limits for boilers which commenced construction, reconstruction, or modification after February 28, 2005. Boiler #5 was constructed prior to this date, and the addition of natural gas and distillate fuel firing in 2012 did not constitute a modification.

Boilers #8 and #9 were constructed after this date. 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 C.F.R. § 60.43c(e)(4).

c. Visible Emissions

Visible emissions from Boilers #5, #8, and #9 shall not exceed 20% opacity on a 6-minute block average basis, except for one 6-minute block average per hour of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction, during which times McCain shall either comply with the visible emission standard above or the following work practice standards. [40 C.F.R. §§ 60.43c(c) & (d) and 06-096 C.M.R. ch. 115, BPT]

(1) Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for each boiler.

(2) Develop and implement a written startup and shutdown plan for each boiler.

(3) Limit the duration of unit startups, shutdowns, or malfunctions to not exceed one hour per occurrence.

(4) Operate each boiler at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

3. Monitoring Requirements

a. Except as provided in paragraph (b) below, McCain shall conduct performance tests on Boilers #5, #8, and #9 for opacity using 40 C.F.R. Part 60, Appendix A, Method 9 according to the following schedule:
[40 C.F.R. § 60.47c(a)]

If fuels other than natural gas (e.g. biogas, specification waste oil, or vegetable oil) are being co-fired in a boiler when the switch is made to distillate fuel, performance testing may be conducted while continuing to co-fire the alternate fuel.

(1) If no visible emissions were observed in the most recent Method 9 performance test, the next performance test shall be completed within 12 calendar months or within 45 days of firing oil in the boiler, whichever is later.

(2) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was less than or equal to 5% opacity, the next performance test shall be completed within 6 calendar months or within 45 days of firing oil in the boiler, whichever is later.

(3) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 5% but less than or equal to 10% opacity, the next performance test shall be completed within 3 calendar months or within 45 days of firing oil in the boiler, whichever is later.

(4) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 10% opacity, the next performance test shall be completed within 45 days.

b. The observation period for the Method 9 performance test may be reduced from 3 hours to 60 minutes if all 6-minute block averages are less than 10% opacity and all individual 15-second observations are less than or equal to 20% opacity during the initial 60 minutes of observation.

If the visible emissions observed in the most recent Method 9 performance test were less than 10% opacity, McCain may elect to perform subsequent performance tests using 40 C.F.R. Part 60, Appendix A, Method 22 as follows:

(1) McCain shall conduct 10-minute observations each operating day Boilers #5, #8, and #9 fire oil using Method 22.

(2) If no visible emissions are observed for 10 operating days, McCain may reduce observations to once every 7 operating days. If any visible emissions are observed, daily observations shall be resumed.

(3) If the sum of the occurrence of any visible emissions is greater than 30 seconds per 10-minute observation, McCain shall immediately conduct a 30-minute observation.

(4) If the sum of the occurrence of any visible emissions is greater than 90 seconds per 30-minute observation, McCain shall either document the adjustments made to Boilers #5, #8, and #9 and demonstrate within 24 hours that the sum of the occurrence of any visible emissions is not greater than 90 seconds per 30-minute observation or conduct a Method 9 performance test within 45 days.

4. Reporting and Recordkeeping

a. McCain shall maintain records of the amount of waste oil combusted during each calendar month and the amount of each of the other fossil fuels delivered during each calendar month.
[40 C.F.R. § 60.48c(g)(2)]

b. For each opacity performance test performed, McCain shall maintain records of the following:

(1) Dates and time intervals of all opacity or visible emissions observation periods;

(2) Name and affiliation for each visible emission observer participating in the performance test. For Method 9 performance tests, include a copy of the current visible emission reading certification for each visible emission observer;

(3) Copies of all visible emission observer opacity field data sheets; and

(4) Documentation of any adjustments made and the time the adjustments were completed to demonstrate compliance with the applicable monitoring requirements (Method 22 observations only).

c. McCain shall submit semi-annual reports to EPA and to the Department. [40 C.F.R. § 60.48c(d)] These reports shall include the following:

(1) Calendar dates covered in the reporting period; [40 C.F.R. § 60.48c(e)(1)]

(2) Records of fuel supplier certifications; [40 C.F.R. § 60.48c(e) (11)] and

(3) Any instances of excess emissions (including opacity) from Boilers #5, #8, and #9**.** [40 C.F.R. § 60.48c(c)]

d. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j)]

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

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

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

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 C.F.R. Part 63, Subpart JJJJJJ. These units are considered existing oil boilers. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements is listed below. Notification forms and additional rule information can be found on the following website: https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source.

1. Compliance Dates, Notifications, and Work Practice Requirements

a. Initial Notification of Compliance

An Initial Notification of Compliance was submitted to the EPA on 9/2/2011. [40 C.F.R. § 63.11225(a)(2)]

b. Boiler Tune-Up Program

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

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

Boiler Category	Tune-Up Frequency
Existing coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up. ***Boilers #5, #8, and #9***	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

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

(i) 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. [40 C.F.R. § 63.11223(b)(1)]

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

(iii) 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. [40 C.F.R. § 63.11223(b)(3)]

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

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

(vi) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.
[40 C.F.R. § 63.11223(b)(7)]

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

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

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

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

(iv) A Notification of Compliance Status was submitted to EPA on July 15, 2014.
[40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

(5) Compliance Report

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

(i) Company name and address;

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

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

(iv) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."

2. "No secondary materials that are solid waste were combusted in any affected unit."

3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(6) 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 C.F.R. § 63.11196(a)(3)]

(ii) A Notification of Compliance Status was required to be submitted to EPA no later than July 19, 2014. The notification was submitted on July 15, 2014.
[40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(c)]

2. Recordkeeping

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

a. Copies of notifications and reports with supporting compliance documentation;

b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;

c. Records of the occurrence and duration of each malfunction of each applicable boiler; and

d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

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

J. Sludge Heater

McCain operates the Sludge Heater to aid in the heating of the digester. It maintains the digester internal temperature at approximately 95ºF by preheating the incoming potato slurry. It was manufactured in 2012 with a maximum heat input of 2.66 MMBtu/hr. The Sludge Heater fires propane on startup and primarily biogas when operating.

With the exception of SO_2, emissions from the Sludge Heater are equivalent to those of propane. Emissions of SO_2 are based on an estimated concentration of hydrogen sulfide (H_2S) in the biogas of 0.57% established in NSR License A-436-77-2-A, (1/6/2012).

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 JJJJJJ). In addition, this unit fires only gaseous fuel and would also be considered exempt from Subpart JJJJJJ as a gas-fired unit.

3. Emission Limits and Streamlining

   a. Criteria Pollutants

      For the Sludge Heater, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.05 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	0.05 lb/MMBtu
	0.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	0.1 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM_{10}	0.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	0.1 lb/hr
SO_2	3.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	3.0 lb/hr
NO_x	0.4 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	0.4 lb/hr
CO	0.3 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	0.3 lb/hr
VOC	0.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	0.1 lb/hr

b. Visible Emissions

When firing propane, visible emissions from the Sludge Heater shall not exceed 10% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

While firing biogas, visible emissions from the Sludge Heater shall not exceed 20% opacity on a 6-minute block average basis, except for periods of startup, shutdown, or malfunction during which times McCain may elect to demonstrate compliance through the following work practice standards in lieu of the numerical opacity standard.
[06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

(1) Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for the Sludge Heater.

(2) Develop and implement a written startup and shutdown plan for the Sludge Heater.

(3) Limit the duration of unit startups, shutdowns, or malfunctions to not exceed one hour per occurrence.

(4) Operate the Sludge Heater at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Sludge Heater shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

5. Compliance Assurance Monitoring

CAM is not applicable to the Sludge Heater.

6. Periodic Monitoring

McCain shall operate, record data, and maintain records from the following values for the Sludge Heater.

a. Gallons of propane fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

b. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

7. Parameter Monitors

There are no Parameter Monitors required for the Sludge Heater.

8. 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. New Source Performance Standards (NSPS)

   Because the Biogas Flare does not generate steam, it is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc. These standards apply 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)

   Because the Biogas Flare does not generate steam, it is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ.

3. Emission Limits and Streamlining

   a. Criteria Pollutants

      For the Biogas Flare, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

      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.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.2 grains/dscf	06-096 C.M.R. ch. 104 (A-436-70-D-R/A, 5/29/2015)	0.2 grains/dscf
	0.32 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	0.32 lb/hr
SO_2	29.3 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)	29.3 lb/hr
NO_x	4.20 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	4.20 lb/hr
CO	3.53 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	3.53 lb/hr
VOC	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	0.23 lb/hr

b. Visible Emissions

Visible emissions from Biogas Flare shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)]

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Biogas Flare shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	grains/dscf	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

5. Compliance Assurance Monitoring

   CAM is not applicable to the Biogas Flare.

6. Periodic Monitoring

   McCain shall operate, record data, and maintain records from the following values for the Biogas Flare.

   a. Date, time, and duration of any downtime for the Biogas Flare. [06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)]

   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. [06-096 C.M.R. ch. 140, BPT (A-436-77-2-A, 1/6/2012)]

   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. [06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)]

7. Parameter Monitors

   There are no Parameter Monitors required for the Biogas Flare.

8. CEMS and COMS

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

L. Anaerobic 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 is 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 Anaerobic Digester for anaerobic digestion. The anaerobic digestion tank is operated under vacuum with an airtight cover. The biogas that is generated leaves the Anaerobic 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 Anaerobic Digester project was addressed in NSR license A-436-77-2-A, issued 1/6/2012. 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_2e	74,900

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

Based on the maximum biogas output of the Anaerobic 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 Anaerobic Digester project for any pollutant except for SO_2. Therefore, McCain shall only be required to maintain records of the 12-month rolling total SO_2 emissions from the Digester project. [06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

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 Anaerobic 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 SO_2 limit of 39.9 tons/year from the equipment included in the Digester project shall be demonstrated on a 12-month rolling total basis by taking the total amount of biogas produced by the Anaerobic Digester and assuming that all hydrogen sulfide (H_2S) in the biogas is converted to SO_2 upon combustion. In NSR License A-436-77-6-M (5/12/2016), it was documented that the

H_2S concentration of the biogas was 0.04% by volume. McCain may use the 0.04% H_2S concentration when calculating emissions from the Anaerobic Digester project.

2. Periodic Monitoring

McCain shall monitor and record the following values monitors for the Anaerobic Digester:

a. Standard cubic feet of biogas generated by the Anaerobic Digester on a monthly and 12-month rolling total basis.
[06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

b. Actual emissions increase of SO_2 from the Anaerobic Digester project on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

3. Parameter Monitors

There are no Parameter Monitors required for the Anaerobic Digester.

4. CEMS and COMS

There are no CEMS or COMS required for the Anaerobic Digester.

M. Emergency Generator and Fire Pump

McCain operates an Emergency Generator. The Emergency Generator is a generator set, consisting of an engine and an electrical generator. The Emergency Generator has an engine rated at 1.6 MMBtu/hr which fires distillate fuel. The Emergency Generator was manufactured in 2002 by Olympia**.**

McCain also operates a Fire Pump. The Fire Pump has an engine rated at 1.0 MMBtu/hr which fires distillate fuel. The Fire Pump was manufactured in1999 by Detroit Diesel.

1. New Source Performance Standards (NSPS)

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is not applicable to the Emergency Generator and Fire Pump since the units were manufactured before April 1, 2006.

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 C.F.R. Part 63, Subpart ZZZZ is

applicable to the Emergency Generator and Fire Pump. The units are considered existing, emergency stationary reciprocating internal combustion engines (RICE) 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 Engine Designation and Operating Criteria

Under Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for 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 more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, 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.

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

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements

	Operating Limitations
Compression ignition (distillate fuel) units: **Emergency Generator and Fire Pump**	- 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 engines 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 engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 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 each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R.§ 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 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.
[40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing
As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, 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). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping
McCain shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

3. Emission Limits and Streamlining

a. Criteria Pollutants

For the Emergency Generator and Fire Pump, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Emergency Generator

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.49 lb/hr
PM_{10}	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.49 lb/hr
SO_2	0.01 lb/hr (based on 0.0015% sulfur limit, by weight)	06-096 C.M.R. ch. 140, BPT	0.01 lb/hr
NO_X	7.01 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	7.01 lb/hr
CO	1.51 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	1.51 lb/hr
VOC	0.56 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.56 lb/hr

Fire Pump

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.31 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.31 lb/hr
PM_{10}	0.31 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.31 lb/hr
SO_2	0.01 lb/hr (based on 0.0015% sulfur limit, by weight)	06-096 C.M.R. ch. 140, BPT	0.01 lb/hr
NO_X	4.45 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	4.45 lb/hr
CO	0.96 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.96 lb/hr
VOC	0.36 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	0.36b/hr

b. Visible Emissions

Visible emissions from each of the emergency engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time McCain may elect to comply with the following work practice standards in lieu of the numerical emission limit.
[06-096 C.M.R. ch. 101, § 3(A)(4)(a)]

(1) Maintain a log (written or electronic) of the date, time, and duration of all generator startups.

(2) Operate the engines shall be operated in accordance with the manufacturer's emission-related operating instructions.

(3) Minimize the engine's time spent at idle during startup 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 shall apply.

(4) Operate the engines, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Emergency Generator and Fire Pump 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 Emergency Generator and Fire Pump.

6. Periodic Monitoring

McCain shall operate, record data, and maintain records for the following values for the Emergency Generator and Fire Pump:

a. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]

b. Log of the duration and reasons for all operating times as they occur.

c. Records of all maintenance conducted.

d. Sulfur content of the distillate fuel fired based on fuel receipts from the supplier. [40 C.F.R. Part 63, Subpart ZZZZ]

7. Parameter Monitors

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

8. CEMS and COMS

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

N. Dryers and 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 products 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, add-on 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

a. Criteria Pollutants

For the dryers and fryers, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Prime 1 Fryer

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	2.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	2.9 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	20% opacity on a six (6) minute block average basis.

Prime 2 Fryer

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	6.0 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	6.0 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	20% opacity on a six (6) minute block average basis.

Specialty Fryer

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	5.7 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017)	5.7 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis except for one (1) six-minute block average in a 1-hour period, during which visible emissions shall not exceed 40% opacity.	06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017)	20% opacity on a six (6) minute block average basis except for one (1) six-minute block average in a 1-hour period, during which visible emissions shall not exceed 40% opacity.

Prime 1 Dryer

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	3.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	3.8 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	20% opacity on a six (6) minute block average basis.

Prime 2 Dryer

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	5.6 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	5.6 lb/hr
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	20% opacity on a six (6) minute block average basis.

3. Emission Limit Compliance Method

Compliance with the emission limits associated with the fryers and dryers shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

4. Periodic Monitoring

McCain shall operate, record data, and maintain records for the following values 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. Records of monthly production (tons of finished product) for each fryer line

c. Records of monthly hours of operation for each fryer line.
[06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004) and 06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017)]

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. Portable Engines

McCain may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

Any engine which cannot meet the definition of "portable engine" as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as stationary.

P. Parts Washers

McCain operates four multiple cold cleaning degreasers (parts washers), with the first three installed in 1987 and the fourth installed in 2001. Each has a capacity of 33 gallons and is subject *Solvent Degreasers*, 06-096 C.M.R. ch.130. McCain may add/subtract parts washers compliant with ch. 130 without applying for a license amendment.

This equipment is exempt from *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166 per Section (3)(B).

Periodic monitoring for the parts washers shall consist of recordkeeping including records of solvent added and removed.

Q. Emissions Statement

McCain is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. McCain shall maintain the following records in order to comply with this rule:

1. The amount of distillate fuel fired in Boilers #5, #8, and #9 (each) on a monthly basis;

2. The amount of specification waste oil fired in Boilers #5, #8, and #9 (each) on a monthly basis;

3. The amount of vegetable oil fired in Boilers #5, #8, and #9 (each) on a monthly basis;

4. The amount of natural gas fired in Boilers #5, #8, and #9 (each) on a monthly basis;

5. The amount of biogas fired in Boilers #8, #9, the Sludge Heater, and the Biogas Flare (each) on a monthly basis;

6. The amount of propane fired in the Sludge Heater on a monthly basis;

7. The hours of operation of Boilers #5, #8, and #9, and the Sludge Heater;

8. The sulfur content of the distillate fuel fired in Boilers #5, #8, #9, the Emergency Generator, and the Fire Pump;

9. The sulfur content of the specification waste oil fired in Boilers #5, #8, and #9;

10. The tons of finished product produced from fryer lines #1, #2, and #3 (each).

In reporting year 2020 and every third year thereafter, McCain shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. McCain shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

R. **Facility Annual Emissions**

McCain shall be restricted to 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 8,760 hr/year on residual fuel.
- Firing Boilers #8 and #9 for 8,760 hr/year on residual fuel.
- Facility-wide emissions of SO_2 from the combustion of biogas are calculated based on a maximum production of 320 million dscf/year from both the Anaerobic Digester and waste water treatment plant combined.
- Firing the Sludge Heater for 8,760 hr/year on biogas.
- Flaring up to 240 million cubic feet of biogas per year.
- Operating each of the dryers and fryers for 8,760 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 SO_2 numbers listed above are used to calculate the maximum emissions from the facility as a whole and do not necessarily represent the maximum SO_2 emissions from individual pieces of equipment. Maximum emissions of SO_2 from individual equipment are as follows:

Equipment	Max. SO2 Tons/year
Boiler #5	224.3
Boiler #8	170.8
Boiler #9	170.8
Sludge Heater	13.1
Biogas Flare	83.8

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-I-R pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 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 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 Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 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 of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD 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 C.M.R. ch. 140]

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 an application dated August 22nd, 2019.

Permit Shield Table

Source	Citation	Description	Basis for Determination
Fire Pump Engine, Emergency Generator, & Sludge Heater	06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard	Each unit is < 3.0 MMBtu/hr
Facility	06-096 C.M.R. ch. 111	Petroleum Liquid Storage Vapor Control	No petroleum liquids stored in vessels with capacities > 39,000 gallons
Facility	06-096 C.M.R. ch. 118	Gasoline Dispensing Facilities	Facility does not dispense gasoline
Facility	06-096 C.M.R. ch. 134	VOC RACT	Non-exempt equipment emits less than 40 tpy.
Facility	06-096 C.M.R. ch. 138	NO_x RACT	Non-exempt equipment emits less than 100 tpy.
Fire Pump Engine & Emergency Generator	06-096 C.M.R. ch. 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 applicability date.
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

Source	Citation	Description	Basis for Determination
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 C.M.R. ch. 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 three 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 140]

(8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing 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 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 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 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) **Boilers #5, #8, and #9**

A. Allowable Fuels

1. Boiler #5 is licensed to fire distillate fuel, natural gas, specification waste oil, and vegetable oil. [06-096 C.M.R. ch. 140, BPT and 115, BACT (A-436-77-3-M, 4/6/2012) & (A-436-77-4-M, 8/22/2012)]

2. Boilers #8 & #9 are licensed to fire distillate fuel, natural gas, specification waste oil, vegetable oil, and biogas. [06-096 C.M.R. ch. 140, BPT and 115, BACT (A-436-70-B-A, 4/13/2006), (A-436-77-2-A, 1/6/2012), (A-436-77-3-M, 4/6/2012) & (A-436-77-4-M, 8/22/2012)]

3. McCain shall be allowed burn in Boilers #5, #8 and #9 reclaimed vegetable oil produced on-site. [06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004) and (A-436-70-B-A, 4/13/2006)] **Enforceable by State-only**

4. McCain shall be allowed to burn specification waste oil in Boilers #5, #8 and #9. Only waste oil generated on-site and meeting the criteria of "specification waste oil" (as defined by06-096 C.M.R. ch. 860, *Waste Oil Management Rules*) shall be fired in Boilers #5, #8 and #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 C.M.R. ch. 860 (as amended).
[06-096 C.M.R. ch. 140, BPT (A-436-70-A-I)] **Enforceable by State-only**

B. Fuel Sulfur Content

1. Distillate Fuel

The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm).
[38 M.R.S. § 603-A(2)(A)(3)(a)]

2. Sulfur Content Compliance

Sulfur content compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel used. Fuel sulfur content compliance shall be demonstrated by fuel supplier certification.
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

C. Control Equipment

1. 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 C.M.R. ch. 115, BACT (A-436-71-D-A, 3/12/1999)]

2. 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 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015]

D. Boilers #5, #8 and #9 Emission Limits

(Emission limits are on a 1-hour block average basis unless otherwise stated.)

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

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 103, §2(B)(1)(b)	Federally Enforceable
	7.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	**Enforceable by State-only**
	4.9 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM_{10}	7.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	**Enforceable by State-only**
	4.9 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable
SO_2	51.2 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	**Enforceable by State-only**
	0.1 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable
NO_x	0.14 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	Federally Enforceable
	14.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	Federally Enforceable
	3.1 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable
CO	8.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012 & A-436-77-5-A,4/24/2015)	Federally Enforceable
VOC	0.84 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 3/12/1999)	**Enforceable by State-only**
	0.5 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable

Emissions from boilers #8 and #9 each shall not exceed the following limits:

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 103, §2(B)(1)(b)	Federally Enforceable
	4.0 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)	**Enforceable by State-only**
	2.5 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable
PM_{10}	4.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-70-B-A, 4/13/2006)	Federally Enforceable
	2.5 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable

Pollutant	Emission Limit	Origin and Authority	Enforceability
SO_2	48.9 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
	0.1 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable
NO_x	0.14 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	Federally Enforceable
	7.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)	Federally Enforceable
	1.6 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable
CO	4.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012 & A-436-77-5-A, 4/24/2015)	Federally Enforceable
VOC	0.40 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)	**Enforceable by State-only**
	0.3 lb/hr (when firing only natural gas)	06-096 C.M.R. ch. 115, BACT (A-436-77-3-M, 4/6/2012)	Federally Enforceable

E. Visible Emissions

1. When firing only natural gas, visible emissions from Boilers #5, #8 and #9 each shall not exceed 10% opacity on a six (6) minute block average basis. [06-096 C.M.R. ch. 101, §3(A)(3)]

2. When firing any fuel other than natural gas, visible emissions from Boilers #5, #8, and #9 each shall not exceed 20% opacity on a 6-minute block average, except for one 6-minute block average per hour of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction, during which times McCain may elect to comply with the visible emission standard above or the following work practice standards. [40 C.F.R. §§ 60.43c(c) and (d)]

   a. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for the boiler.

   b. Develop and implement a written startup and shutdown plan for the boiler.

   c. Limit the duration of unit startups, shutdowns, or malfunctions to not exceed one hour per occurrence.

d. Operate the boiler at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

F. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods as approved by the Department. [06-096 C.M.R. ch. 140]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 7	As requested
	lb/hr		
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	In accordance with 40 C.F.R. 60.47c

G. Periodic Monitoring

McCain shall operate, record data, and maintain records from the following values for Boilers #5, #8 and #9:

1. Gallons of distillate fuel fired on a monthly and 12-month rolling total basis. [40 C.F.R. § 60.48c(g)(2) (A-436-77-4-M, 8/22/2012, BPT)]

2. Gallons of specification waste oil fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)]

3. Gallons of vegetable oil fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT and 40 C.F.R. § 60.48c(g)(2) (A-436-70-A-I, 12/2/2004)]

4. Standard cubic feet of natural gas fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT and 40 C.F.R. § 60.48c(g)(2) (A-436-77-3-M, 4/6/2012)]

5. Sulfur content of distillate fuel fired based on fuel supplier certification. [40 C.F.R. §§ 60.46c(e) and 60.48c(f) (A-436-70-A-I, 12/2/2004)]

6. Records of a representative sample of waste oil demonstrating it meets the requirements to be considered specification waste oil. [06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)] **Enforceable by State-only**

7. Records of opacity performance tests. [40 C.F.R. Part 60, Subpart Dc (A-436-70-G-A, 2/7/2018)]

McCain shall operate, record data, and maintain records from the following values for Boilers #8 and #9:

8. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT and 40 C.F.R. § 60.48c(g)(2) (A-436-77-5-A, 4/24/2015)]

9. Daily hours of operation for each boiler. [06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)] **Enforceable by State-only**

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

McCain shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #5, #8 and #9 including, but not limited to, the following:

A. Monitoring Requirements

1. Except as provided in paragraph (3) below, McCain shall conduct performance tests on Boilers #5, #8, and #9 for opacity using 40 C.F.R. Part 60, Appendix A, Method 9 according to the following schedule: [40 C.F.R. § 60.47c(a)]

   If fuels other than natural gas (e.g. biogas, specification waste oil, or vegetable oil) are being co-fired in a boiler when the switch is made to distillate fuel, performance testing may be conducted while continuing to co-fire the alternate fuel.

a. If no visible emissions were observed in the most recent Method 9 performance test, the next performance test shall be completed within 12 calendar months or within 45 days of firing oil in the boiler, whichever is later.

b. If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was less than or equal to 5% opacity, the next performance test shall be completed within 6 calendar months or within 45 days of firing oil in the boiler, whichever is later.

c. If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 5% but less than or equal to 10% opacity, the next performance test shall be completed within 3 calendar months or within 45 days of firing oil in the boiler, whichever is later.

d. If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 10% opacity, the next performance test shall be completed within 45 days.

2. The observation period for the Method 9 performance test may be reduced from 3 hours to 60 minutes if all 6-minute block averages are less than 10% opacity and all individual 15-second observations are less than or equal to 20% opacity during the initial 60 minutes of observation.

3. If the visible emissions observed in the most recent Method 9 performance test were less than 10% opacity, McCain may elect to perform subsequent performance tests using 40 C.F.R. Part 60, Appendix A, Method 22 as follows:

a. McCain shall conduct 10-minute observations each operating day Boilers #5, #8, and #9 fires oil using Method 22.

b. If no visible emissions are observed for 10 operating days, McCain may reduce observations to once every 7 operating days. If any visible emissions are observed, daily observations shall be resumed.

c. If the sum of the occurrence of any visible emissions is greater than 30 seconds per 10-minute observation, McCain shall immediately conduct a 30-minute observation.

d. If the sum of the occurrence of any visible emissions is greater than 90 seconds per 30-minute observation, McCain shall either document the adjustments made to Boilers #5, #8, and #9 and demonstrate within 24 hours that the sum of the

occurrence of any visible emissions is not greater than 90 seconds per 30-minute observation or conduct a Method 9 performance test within 45 days.

B. Reporting and Recordkeeping

1. For each opacity performance test performed, McCain shall maintain records of the following:

   a. Dates and time intervals of all opacity or visible emissions observation periods;

   b. Name and affiliation for each visible emission observer participating in the performance test. For Method 9 performance tests, include a copy of the current visible emission reading certification for each visible emission observer.

   c. Copies of all visible emission observer opacity field data sheets; and

   d. Documentation of any adjustments made and the time the adjustments were completed to demonstrate compliance with the applicable monitoring requirements (Method 22 observations only).

2. McCain shall submit semi-annual reports to EPA and to the Department. [40 C.F.R. § 60.48c(d)] These reports shall include the following:

   a. Calendar dates covered in the reporting period; [40 C.F.R. § 60.48c(e)(1)]

   b. Records of fuel supplier certifications; [40 C.F.R. § 60.48c(e)(11)] and

   c. Any instances of excess emissions (including opacity) from Boilers #5, #8, and #9.

   [40 C.F.R. § 60.48c(c)]

3. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j)]

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

A. McCain shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #5, #8, and #9 including, but not limited to, the following:

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 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 coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up. ***Boilers #5, #8, and #9***	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. 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. [40 C.F.R. § 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 C.F.R. § 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. [40 C.F.R. § 63.11223(b)(3)]

(4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 63.11223(b)(7)]

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

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

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

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

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

   a. Company name and address;

   b. A statement of whether the source has complied with all the relevant requirements of this Subpart;

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

   d. The following certifications, as applicable:

      (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."

      (2) "No secondary materials that are solid waste were combusted in any affected unit."

      (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

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

   a. Copies of notifications and reports with supporting compliance documentation;

   b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;

   c. Records of the occurrence and duration of each malfunction of each applicable boiler; and

   d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

   Records shall be in a form suitable and readily available for expeditious review.

(17) **Sludge Heater**

A. Allowable Fuels

The Sludge Heater is licensed to fire propane and biogas.
[06-096 C.M.R. 115, BACT (A-436-77-2-A, 1/6/2012)]

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

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	0.05 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
	0.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
PM_{10}	0.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
SO_2	3.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
NO_x	0.4 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
CO	0.3 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable
VOC	0.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)	Federally Enforceable

C. Visible Emissions

When firing propane, visible emissions from the Sludge Heater shall not exceed 10% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

While firing biogas, visible emissions from the Sludge Heater shall not exceed 20% opacity on a 6-minute block average basis, except for periods of startup, shutdown, or malfunction during which times McCain may elect to demonstrate compliance through the following work practice standards in lieu of the numerical opacity standard.
[06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

1. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for the Sludge Heater.

2. Develop and implement a written startup and shutdown plan for the Sludge Heater.

3. Limit the duration of unit startups, shutdowns, or malfunctions to not exceed one hour per occurrence.

4. Operate the Sludge Heater at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

D. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods as approved by the Department [06-096 C.M.R. ch. 140]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

E. Periodic Monitoring

McCain shall operate, record data, and maintain records from the following values for the Sludge Heater:

1. Gallons of propane fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

2. Standard cubic feet of biogas fired on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

(18) **Biogas Flare**

A. McCain is licensed to operate a biogas flare with a heat input capacity of 26.5 MMBtu/hr. [06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)] Enforceable by State-only

B. McCain is licensed to burn propane as a continuous pilot light for the Biogas Flare. [06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)] Enforceable by State-only

C. McCain is limited to an annual total of flaring and/or combusting 240 million cubic feet of biogas. [06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)] Enforceable by State-only

D. Biogas Flare Emission Limits
(Emission limits are on a 1-hour block average basis unless otherwise stated.)

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

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	0.2 grains/dscf	06-096 C.M.R. ch. 104 (A-436-70-D-R/A, 5/29/2015)	Federally Enforceable
	0.32 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	**Enforceable by State-only**
SO_2	29.3 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-B-A, 4/13/2006)	**Enforceable by State-only**
NO_x	4.20 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	**Enforceable by State-only**
CO	3.53 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	**Enforceable by State-only**
VOC	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)	**Enforceable by State-only**

2. Visible Emissions

Visible emissions from Biogas Flare shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)] **Enforceable by State-only**

E. Compliance Methods

Compliance with the emission limits associated with the Biogas Flare shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods as approved by the Department:
[06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	grains/dscf	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

F. Periodic Monitoring

McCain shall operate, record data, and maintain records from the following values for the Biogas Flare:

1. Date, time, and duration of any downtime for the Biogas Flare. [06-096 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)]
   Enforceable by State-only
2. 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. [06-096 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

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 C.M.R. ch. 140, BPT (A-436-70-D-R/A, 5/29/2015)]
   Enforceable by State-only

(19) **Anaerobic Digester**

A. McCain shall not exceed the following actual emissions increases as a result of the Anaerobic Digester project described in NSR license A-436-77-2-A on a 12-month rolling total basis until after January 2022:

Pollutant	Tons/year
SO_2	39.9

[06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

B. Emissions increases from the Anaerobic Digester project shall include combustion emissions from biogas produced in the Anaerobic Digester.
[06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

C. Compliance with the annual limit increase of 39.9 tons/year from the equipment included in the Anaerobic Digester project shall be demonstrated on a 12-month rolling total basis by taking the total amount of biogas produced by the Anaerobic Digester and assuming all H_2S in the biogas is converted to SO_2 upon combustion. [06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

D. McCain shall meter each source of biogas (the Anaerobic 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 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

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 C.M.R. ch. 115, BACT (A-436-77-2-A, 1/6/2012)]

F. Periodic Monitoring

McCain shall monitor and record the following values for the Anaerobic Digester:

1. Standard cubic feet of biogas generated by the Anaerobic Digester on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

2. Actual emissions increases of SO_2 from the Anaerobic Digester project on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT (A-436-77-5-A, 4/24/2015)]

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

A. Allowable Operation and Fuels

The Emergency Generator and Fire Pump are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]

B. Fuel Sulfur Content

1. The distillate fuel sulfur content for the Emergency Generator and Fire Pump shall be limited to 0.0015% sulfur by weight. [06-096 C.M.R. ch. 140, BPT]

2. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 140, BPT]

C. Emissions shall not exceed the following limits:

Emergency Generator

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
PM_{10}	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
SO_2	0.01 lb/hr (based on 0.0015% sulfur limit, by weight)	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
NO_X	7.01 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
CO	1.51 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
VOC	0.56 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**

Fire Pump

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	0.31 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
PM_{10}	0.31 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
SO_2	0.01 lb/hr (based on 0.0015% sulfur limit, by weight)	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
NO_X	4.45 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
CO	0.96 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**
VOC	0.36 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004)	**Enforceable by State-only**

D. Visible Emissions

Visible emissions from the Emergency Generator and Fire Pump shall not exceed 20% opacity each on a six-minute block average basis except for periods of startup during which time McCain may elect to comply with the following work practice standards in lieu of the numerical emission limit. [06-096 C.M.R. ch. 101, § 3(A)(4)]

1. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.

2. Operate the Emergency Generator and Fire Pump in accordance with the manufacturer's emission-related operating instructions.

3. Minimize the engine's time spent at idle during startup 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 shall apply.

4. Operate the Emergency Generator and Fire Pump, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

E. The Emergency Generator and Fire Pump shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. McCain shall meet the following operational limitations for each of the compression ignition emergency engines (Emergency Generator and Fire Pump);

   a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;

   b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

   c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.
   [40 C.F.R. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 140, BPT]

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 C.F.R.§ 63.6625(i)]

3. Non-Resettable Hour Meter

   A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

4. Maintenance, Testing, and Non-Emergency Operating Situations

   a. The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, 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). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]

   b. McCain shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

5. Operation and Maintenance
   The engines 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 C.F.R. § 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.
[40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

F. Compliance Methods

Compliance with the emission limits associated with the Emergency Generator and Fire Pump shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140, BPT]

G. Periodic Monitoring

McCain shall operate, record data, and maintain records for the following values for the Emergency Generator and Fire Pump:

1. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]

2. Log of the duration and reasons for all operating times as they occur.

3. Records of all maintenance conducted.

4. Sulfur content of the distillate fuel fired based on fuel receipts from the supplier.
[40 C.F.R. Part 63, Subpart ZZZZ]

(21) **Dryers and Fryers**

A. Dryers and Fryers Emission Limits
(Emission limits are on a 1-hour block average basis unless otherwise stated.)

Emissions from the Dryers and Fryers shall not exceed the following limits:

Prime 1 Fryer

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	2.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	**Enforceable by State-only**
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	Federally Enforceable

Prime 2 Fryer

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	6.0 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	**Enforceable by State-only**
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	Federally Enforceable

Specialty Fryer

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	5.7 lb/hr	06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017)	Federally Enforceable
Visible Emissions	20% opacity on a six (6) minute block average basis except for one (1) six-minute block average in a 1-hour period, during which visible emissions shall not exceed 40% opacity.	06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017)	Federally Enforceable

Prime 1 Dryer

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	3.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	**Enforceable by State-only**
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	Federally Enforceable

Prime 2 Dryer

Pollutant	Emission Limit	Origin and Authority	Enforceability
PM	5.6 lb/hr	06-096 C.M.R. ch. 140, BPT (A-436-71-D-A, 10/21/2008)	**Enforceable by State-only**
Visible Emissions	20% opacity on a six (6) minute block average basis.	06-096 C.M.R. ch. 101, §3(B)(4)	Federally Enforceable

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 C.M.R. ch. 140, BPT (A-436-72-A-R, 5/22/1998) and 06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017)]

C. Prime 2 Fryer shall exhaust through a stack that is at least 54 feet above ground level. [06-096 C.M.R. ch. 140, BPT (A-436-70-F-A, 1/17/2017)] **Enforceable by State-only**

D. Periodic Monitoring

McCain shall operate, record data, and maintain records for the following values for the Fryers and Dryers.

1. Date, time, duration, and reason for all downtime for each rotoclone.

2. Log detailing all maintenance and any malfunctions for each rotoclone.

3. Records of monthly production (tons of finished product) for each fryer line

4. Records of monthly hours of operation for each fryer line.

[06-096 C.M.R. ch. 140, BPT (A-436-70-A-I, 12/2/2004) and 06-096 C.M.R. ch. 115, BACT (A-436-77-7-A, 3/27/2017]

(22) **Parts Washers**

Parts washers at McCain are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

A. McCain shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 140, BPT]

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 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 subject to 06-096 C.M.R. ch. 130.

1. McCain shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 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 parts washer.

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 washer 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.

3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent
[06-096 C.M.R. ch. 130]

(23) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis.
[06-096 C.M.R. ch. 101, § 3(C)]

(24) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

(25) **Semiannual Reporting** [06-096 C.M.R. ch. 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 Department within seven calendar days of the due date.

C. Each semiannual report shall include a summary of the periodic 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.

(26) **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 31st** 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 C.M.R. ch. 140]

(27) **Annual Emission Statement**

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, McCain shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

B. McCain shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount of distillate fuel fired in Boilers #5, #8, and #9 (each) on a monthly basis;

2. The amount of specification waste oil fired in Boilers #5, #8, and #9 (each) on a monthly basis;

3. The amount of vegetable oil fired in Boilers #5, #8, and #9 (each) on a monthly basis;

4. The amount of natural gas fired in Boilers #5, #8, and #9 (each) on a monthly basis;

5. The amount of biogas fired in Boilers #8, #9, the Sludge Heater, and the Biogas Flare (each) on a monthly basis;

6. The amount of propane fired in the Sludge Heater on a monthly basis;

7. The hours of operation of Boilers #5, #8, and #9, and the Sludge Heater;

8. The sulfur content of the distillate fuel fired in Boilers #5, #8, #9, the Emergency Generator, and the Fire Pump;

9. The sulfur content of the specification waste oil fired in Boilers #5, #8, and #9;

10. The tons of finished product produced from fryer lines #1, #2, and #3 (each).
[06-096 C.M.R. ch. 137]

C. In reporting year 2020 and every third year thereafter, McCain shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). McCain shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

(28) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

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

(29) **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 C.F.R. 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 C.F.R. Part 82, Subpart F]

(30) **Asbestos Abatement**

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

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

A. McCain shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.

B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 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 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 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**

(32) **New Source Review**

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

DONE AND DATED IN AUGUSTA, MAINE THIS **2nd** DAY OF **April**, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____for_____
GERALD D. REID, 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 six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/22/2019
Date of application acceptance: 8/26/2019

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

FILED

APR 2, 2020

State of Maine
Board of Environmental Protection