

<b>Mid-Maine Waste Action Corporation</b>	)	<b>DEPARTMENTAL</b>
<b>Androscoggin County</b>	)	<b>FINDINGS OF FACT AND ORDER</b>
<b>Auburn, Maine</b>	)	<b>PART 70 AIR EMISSION LICENSE</b>
<b>A-378-70-A-I</b>		

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

A. Introduction

FACILITY	Mid-Maine Waste Action Corporation (MMWAC)
LICENSE NUMBER	A-378-A-I
LICENSE TYPE	Initial Part 70 License for Existing Source
SIC CODES	4953
NATURE OF BUSINESS	Municipal waste combustion with resource recovery
FACILITY LOCATION	One Goldthwaite Road, Auburn
DATE OF LICENSE ISSUANCE	July 1, 2002
LICENSE EXPIRATION DATE	July 1, 2007

B. Emission Equipment

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

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
Municipal Waste Combustor Unit #1	47.7 MMBtu/hr @ (5200 Btu/lb); 9173 lb/hr 110 tons/day	Municipal solid waste (MSW) combustor
Municipal Waste Combustor Unit #2	47.7 MMBtu/hr @ (5200 Btu/lb); 9173 lb/hr 110 tons/day	Municipal solid waste (MSW) combustor
Ash Handling System	n/a	Process Equipment

C. Insignificant Activities

The following insignificant activities are exempt from this Part 70 license:

1. Space Heaters (17)
2. Water Heater
3. Storage Tanks (5)
4. Boiler Chemicals (4)
5. Maintenance Chemical Storage
6. Maintenance Fluids Use
7. Maintenance Welding
8. Emergency Diesel Generator and Diesel Fire Pump \*
9. All Paved Roadways \*\*

\* The Emergency Diesel Generator and the Diesel Fire Pump are insignificant provided they burn diesel fuel with a maximum sulfur content of 0.05% by weight. As such, MMWAC will maintain records of the diesel fuel percent sulfur by weight to demonstrate it remains 0.05% or less. Although these units are insignificant, they are still subject to the requirements of MEDEP Chapter 101, Visible Emissions.

\*\* Although the paved roadways are insignificant, they are still subject to the requirements of MEDEP Chapter 101, Visible Emissions.

D. Application Classification

The application for MMWAC does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Municipal Waste Combustor Units #1 and #2

Municipal Waste Combustor Units #1 and #2 (individually, the “Combustor” and collectively the “Combustors”) are identical in size and configuration, including all add-on control systems. They were manufactured by Laurent Bouillet in 1991 with a maximum design operating capacity of 25,200 lb steam/hour firing 9,173 lb/hr Municipal Solid Waste (MSW) each. Waste class types 0, 1, 2, 3, 5 and 6 are fired in the Combustors; biomedical, and RCRA hazardous wastes are excluded. The combustors are refractory lined incinerators installed in 1992 with 210° oscillation. Each combustor also has two natural gas fired auxiliary burners with maximum design heat input rate of 17 MMBtu/hr each.

Emissions from the two combustors vent through separate control equipment and then to a common stack 213 feet above ground level (AGL).

Each of MMWAC's combustors was manufactured after August 17, 1971 and are each designed to handle 110 ton/day of MSW. Therefore, each is classified as Class II unit (less than or equal to 250 tons per day of MSW) and is subject to 40CFR Part 60, Subpart BBBB: Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999.

### Streamlining

1. MMWAC accepts streamlining for particulate matter (PM) requirements. 40 CFR Part 60, Subpart BBBB and MEDEP Chapters 103, 104 and 121 regulate PM. However, the Best Practical Treatment (BPT) limit is more stringent and shall be used.
2. MMWAC accepts streamlining for sulfur dioxide (SO<sub>2</sub>) requirements. 40 CFR Part 60, Subpart BBBB regulates SO<sub>2</sub> emission limits. The Chapter 121 limit is more stringent and shall be used.
3. MMWAC accepts streamlining for hydrogen chloride (HCL) requirements. 40 CFR Part 60, Subpart BBBB and MEDEP Chapter 121 regulate HCl emission limits. However, BPT is more stringent and shall be used.
4. MMWAC accepts streamlining for carbon monoxide (CO) requirements. 40 CFR Part 60, Subpart BBBB and MEDEP Chapter 121 regulate CO emission limits. However, BPT is more stringent and shall be used.
5. MMWAC accepts streamlining for cadmium (Cd) requirements. 40 CFR Part 60, Subpart BBBB regulates Cd emission limits. However, BPT is more stringent and shall be used.
6. MMWAC accepts streamlining for mercury (Hg) requirements. 40 CFR Part 60, Subpart BBBB regulates Hg emission limits. However, BPT is more stringent and shall be used.
7. MMWAC accepts streamlining for lead (Pb) requirements. 40 CFR Part 60, Subpart BBBB regulates Pb emission limits. However, BPT is more stringent and shall be used.
8. MMWAC accepts streamlining for opacity requirements. 40 CFR Part 60, Subpart BBBB and MEDEP Chapter 101 regulate opacity limits. Subpart BBBB is more stringent and shall be used.

### Periodic Monitoring

Stack testing for dioxin/furans, cadmium, lead, hydrogen chloride, opacity and particulate matter emission rates shall be performed in accordance with this license.

Natural gas use record keeping shall be performed.

Documentation that the COM, O<sub>2</sub>, SO<sub>2</sub>, CO, and NO<sub>x</sub> CEMs are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51 Appendix P, and 40 CFR Part 60 Appendices B and F.

B. Ash Handling System

The ash handling system consists of quench tanks, various conveyors, surge bins, conditioners and the load-out area of the boiler building utilized to collect ash from the combustion process and prepare it for disposal. All fly ash conveyors between the boiler building or pollution control equipment and the fly ash conditioner are also totally enclosed. Bottom ash and fly ash are each conditioned with moisture to render the product dustless prior to discharge onto open conveyors and into open containers. All ash from the Combustors shall be transported in covered containers so as to prevent fugitive emissions.

**Streamlining**

MMWAC accepts streamlining for fugitive ash opacity requirements. 40 CFR Part 60, Subpart BBBB and MEDEP Chapters 101 and 121 regulate opacity. The Chapter 121 opacity limit is more stringent, therefore only the Chapter 121 opacity limits shall be included in this license.

**Periodic Monitoring**

Periodic monitoring shall consist of the monitoring as specified in Condition (16) of this license.

C. Lime Silo

The lime silo stores hydrated lime before it is mixed with water to create a slurry. A separate storage tank holds a lime slurry byproduct. The two sources of slurry are combined in a mix tank and sprayed into the spray dryer absorber of the combustors. A small baghouse on top of the silo is used to control emissions during the filling operations.

**Streamlining**

Opacity

MMWAC accepts streamlining for opacity requirements. Chapter 101, Section 2(C) and Chapter 140, BPT are applicable. The BPT opacity limit is more stringent. Therefore, only the more stringent BPT requirement is included in this license.

**Periodic Monitoring**

Periodic monitoring shall consist of the monitoring as specified in Condition (17) of this license.

D. Solvent Degreasers

MMWAC utilizes solvent degreasers for parts washing.

**Periodic Monitoring**

Periodic monitoring for the degreaser units shall consist of monitoring as specified in Condition (20) of this license.

E. Facility Emissions

MMWAC has the following fuel usage and has the following annual emissions, based on a 12 month rolling total:

- 80,356 total tons of MSW at 5,200 BTU/# in the combustion units (based on 8,760 hours of operation per year)
- 36,660,857 cubic feet of natural gas in the combustion units (based on up to a 10% capacity factor)

**Total Annual Emissions for the Facility**  
(used to calculate the annual license fee)

<b><u>Pollutant</u></b>	<b><u>TPY</u></b>
PM	16.03
PM <sub>10</sub>	16.03
SO <sub>2</sub>	61.08
NO <sub>x</sub>	470.81
CO*	89.08
VOC	10.18

\* CO is not included in the annual fee calculation.

**III. AIR QUALITY ANALYSIS**

There have been no modifications to the facility. Therefore, the existing ambient air quality analysis performed for MMWAC Air Emission License A-378-72-B-A, which demonstrated compliance with Maine Ambient Air Quality Standards, is sufficient for this initial Part 70 License for an Existing Source.

**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
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-378-70-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standards and special conditions below.

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

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

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

### **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;
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.
- (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;
- (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.

(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 effect 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 October, 1996.

<b>SOURCE</b>		<b>CITATION</b>	<b>DESCRIPTION</b>	<b>BASIS FOR DETERMINATION</b>
Storage Tanks	a.	40 CFR Part 68	Accidental Release Prevention	Chemicals stored on site are less than Threshold Quantities
Facility	b.	MEDEP Chapter 134	Reasonably Available Control Technology for Facilities That Emit Volatile Organic Compounds	VOC source is from combustion only, per Section 1(C)(4), MEDEP Chapter 134
Municipal Waste Combustor Units #1 and #2	c.	MEDEP Chapter 135	Hexavalent Chromium Particulate Emission Standard	Sources total aggregate chromium input is less than 0.05% by weight of MSW fired
Facility	d.	40 CFR Parts 72 to 78	Federal Acid Rain Provisions	Facility is not subject to the provisions and does not chose to "opt-in" at this time

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

- (a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 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.

- (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.

**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 (Ref. Title 38 MRSA §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;



- (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;  
**Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (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;  
**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;
- (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.
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:
    - (i) 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;
    - (ii) to demonstrate compliance with the applicable emission standards; or

(iii) pursuant to any other requirement of this license to perform stack testing.

(b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

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

**Enforceable by State-only**

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

(a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

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

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

**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 in emission standards 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 MRSA § 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.

(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.

(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.

(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

**Mid-Maine Waste Action Corporation** )  
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- (e) Such other facts as the Department may require to determine the compliance status of the source;

**Special Conditions**

- (14) Municipal Waste Combustor Units #1 and #2
- A. Each Combustor shall fire only MSW (municipal solid waste). Auxiliary fuel use shall be limited to natural gas.  
 [MEDEP, Chapter 140, BPT]
- B. MMWAC shall fire only waste types 0, 1, 2, 3, 5, and 6, as defined in MEDEP Chapter 100.  
 [MEDEP, Chapter 140, BPT] **Enforceable by State-only**
- C. The following are unacceptable wastes and shall not be combusted in the units: waste classified as RCRA hazardous waste, low level radioactive, and red bag medical wastes.  
 [MEDEP, Chapter 140, BPT]
- D. Natural gas use, during a calendar year, shall be limited to a combined annual capacity factor of 10 percent or less, calculated in accordance with 40 CFR Part 60 Subpart Db.  
 [40 CFR Part 60 Subpart Db]

Natural gas fired into each Combustor shall be monitored by a fuel totalizer operated in accordance with the manufacturer’s specifications.  
 [ME DEP, Chapter 140, BPT] **Enforceable by State-only**

- E. Emissions from each Combustor shall not exceed the following limits:

<b>Pollutant</b>	<b>Limit</b>	<b>Units</b>	<b>Ave Time</b>	<b>Origin and Authority</b>
PM	22.88	mg/dscm @ 7% O <sub>2</sub>	3-run average	MEDEP, Chapter 140, BPT
PM <sub>10</sub>	22.88	mg/dscm @ 7% O <sub>2</sub>	3-run average	MEDEP, Chapter 140, BPT
SO <sub>2</sub>	30 <sup>a</sup>	ppmvd @ 7% O <sub>2</sub>	24-hr daily	MEDEP, Chapter 121
NO <sub>x</sub> (summer)	315	ppmvd @ 7% O <sub>2</sub>	24-hr daily	MEDEP, Chapter 138, NO <sub>x</sub> RACT
NO <sub>x</sub> (winter)	330	ppmvd @ 7% O <sub>2</sub>	24-hr daily	MEDEP, Chapter 138, NO <sub>x</sub> RACT
CO	100	ppmvd @ 7% O <sub>2</sub>	24-hr block	MEDEP, Chapter 140, BPT
VOC	20	ppmvd @ 7% O <sub>2</sub>	24-hour daily	MEDEP, Chapter 140, BPT
HCl	25 <sup>b</sup>	ppmvd @ 7% O <sub>2</sub>	3-run average	MEDEP, Chapter 140, BPT
Pb	0.66	mg/dscm @ 7% O <sub>2</sub>	3-run average	MEDEP, Chapter 140, BPT
Cd	0.03	mg/dscm @ 7% O <sub>2</sub>	3-run average	MEDEP, Chapter 140, BPT
Hg	0.028 <sup>c</sup>	mg/dscm @ 7% O <sub>2</sub>	3-run average	MEDEP, Chapter 140, BPT
PCDD/ PCDF	125.0 (total mass)	ng/dscm @ 7% O <sub>2</sub>	3-run average	40 CFR Part 60, Subpart BBBB

- a. For SO<sub>2</sub>, each Combustor shall achieve 30 ppmvd @ 7% O<sub>2</sub> 24-hr geometric mean or a minimum control efficiency of 80 percent reduction by weight, whichever is less stringent.
- b. For HCl, each Combustor shall achieve 25 ppmvd @ 7% O<sub>2</sub> or a minimum control efficiency of 90 percent reduction by weight, whichever is less stringent.
- c. For Hg, each Combustor shall achieve 0.028 mg/dscm @ 7% O<sub>2</sub> or a minimum control efficiency of 85 percent reduction by weight, whichever is less stringent.

Pollutant	lb/hour*	Origin and Authority
PM	1.83	MEDEP, Chapter 140, BPT
PM <sub>10</sub>	1.83	MEDEP, Chapter 140, BPT
SO <sub>2</sub>	6.97	MEDEP, Chapter 140, BPT
NO <sub>x</sub> (summer)	52.62	MEDEP, Chapter 140, BPT
NO <sub>x</sub> (winter)	54.87	MEDEP, Chapter 140, BPT
CO	10.17	MEDEP, Chapter 140, BPT
VOC	1.16	MEDEP, Chapter 140, BPT

\* MMWAC shall demonstrate compliance with lb/hr emission limitations by stack test when requested by the Department.

Pollutant	lb/hour*	Origin and Authority
Antimony (Sb)	9.17x10 <sup>-4</sup>	MEDEP, Chapter 140, BPT
Arsenic (As)	1.45x10 <sup>-3</sup>	MEDEP, Chapter 140, BPT
Beryllium (Be)	9.42x10 <sup>-6</sup>	MEDEP, Chapter 140, BPT
Cr (Hexavalent)	2.42x10 <sup>-4</sup>	MEDEP, Chapter 140, BPT
Cr (Total)	2.42x10 <sup>-2</sup>	MEDEP, Chapter 140, BPT
Copper (Cu)	8.25x10 <sup>-3</sup>	MEDEP, Chapter 140, BPT
Flourides (as HF)	0.13	MEDEP, Chapter 140, BPT
Formaldehyde	0.07	MEDEP, Chapter 140, BPT
Nickel (Ni)	1.95x10 <sup>-2</sup>	MEDEP, Chapter 140, BPT
Selenium (Se)	7.02x10 <sup>-4</sup>	MEDEP, Chapter 140, BPT
Sulfuric Acid Mist	0.693	MEDEP, Chapter 140, BPT
Zinc (Zn)	8.25x10 <sup>-2</sup>	MEDEP, Chapter 140, BPT

\* MMWAC shall demonstrate compliance with lb/hr emission limitations by stack test when requested by the Department.

- F. Particulate matter (PM, PM<sub>10</sub>) emissions from each unit shall be controlled by the operation and maintenance of a fabric filter.  
[MEDEP, Chapter 140, BPT]
- G. Sulfur Dioxide (SO<sub>2</sub>) and hydrochloric acid (HCl) emissions from each unit shall be controlled by a spray dryer absorber followed by a fabric filter.  
[MEDEP, Chapter 140, BPT]
- H. Mercury emissions from each unit shall be controlled by a carbon injection system.

[MEDEP, Chapter 140, BPT]

- I. Total mercury emissions from the facility shall not exceed 100 pounds per year until January 1, 2004, and shall not exceed 50 pounds per year beginning January 2, 2004.  
[38 M.R.S.A. §585-B] **Enforceable by State-only**
- J. Emissions from Combustor #1 shall vent to Stack #1 and emissions from Combustor #2 shall vent to Stack #2. Each shall be at least 213 feet AGL.  
[MEDEP, Chapter 140, BPT]
- K. Visible emissions from Stack #1 and Stack #2 shall not exceed 10% opacity on a six-minute block average.  
[40 CFR Part 60, Subpart BBBB]
- L. Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system (COMS). MMWAC shall maintain the COMS in accordance with applicable provisions of Chapter 117 and the Special Conditions of this license.  
[MEDEP, Chapter 117 and Chapter 121]
- M. Compliance with the SO<sub>2</sub> ppmvd emission limit (concentration or percent reduction) shall be on a 24-hr daily geometric mean, demonstrated by means of a SO<sub>2</sub> CEMS. The SO<sub>2</sub> CEMS shall be installed and certified downstream of the fabric filter. MMWAC shall maintain the SO<sub>2</sub> CEMS in accordance with Chapter 117 and the Special Conditions of this license. When demonstrating compliance with the 80% reduction in SO<sub>2</sub> emissions, MMWAC shall measure both inlet and outlet SO<sub>2</sub> concentrations of the control device with a CEMS.  
[MEDEP, Chapter 117 and Chapter 121]
- N. Compliance with the NO<sub>x</sub> ppmdv emission limit shall be on a 24-hr block average basis, demonstrated by means of a NO<sub>x</sub> CEMS. MMWAC shall maintain the NO<sub>x</sub> CEMS in accordance with applicable provisions of Chapter 117 and the Special Conditions of this license.  
[MEDEP, Chapter 117 and Chapter 121]
- O. Compliance with the CO ppmdv emission limit shall be on a 24-hr block average basis, demonstrated by means of a CO CEMS. The CO CEMS shall be installed and certified downstream of the fabric filter. MMWAC shall maintain the CO CEMS in accordance with applicable provisions of Chapter 117 and the Special Conditions of this license.  
[MEDEP, Chapter 117 and Chapter 121]

P. MMWAC shall install, calibrate, maintain, and operate a continuous emission monitoring system for O<sub>2</sub> at the outlet of the fabric filter. The O<sub>2</sub> concentration shall be monitored at each location where the SO<sub>2</sub>, CO and NO<sub>x</sub> are monitored. The monitoring system shall comply with Chapter 117 and Chapter 121 of the Department regulations and 40 CFR Part 60 Subpart BBBB. [40 CFR Part 60, Subpart BBBB]

**Q. Parameter Monitor Requirements**

1. MMWAC shall monitor and record the following, as specified, for Combustor #1 and Combustor #2 (parameter monitors):

<b>Parameter</b>	<b>Monitor*</b>	<b>Record*</b>	<b>Origin and Authority</b>
Unit load level as steam flow**	Continuously	Continuously	40 CFR Part 60, Subpart BBBB
Baghouse inlet temperature**	Continuously	Continuously	40 CFR Part 60, Subpart BBBB
Carbon injection rate**	Continuously	Continuously	40 CFR Part 60, Subpart BBBB
Unit combustion temperature	Continuously	Continuously	MEDEP Chapter 140, BPT

\*Note: “Continuously”, for the purpose of this license, is defined as a minimum of 2 points in a one hour period.

\*\*Note: MMWAC is exempt on load level, temperature at the inlet of the baghouse, and carbon feed rate during any of the following five situations [40 CFR Part 60, Subpart BBBB]:

- a. During annual tests for dioxins/furans.
- b. During annual mercury tests (for carbon feed rate requirements only).
- c. During the two weeks preceding annual tests for dioxins/furans.
- d. During the two weeks preceding annual mercury tests (for carbon feed rate requirements only).
- e. Whenever the Department permits MMWAC to do any of the following five actions:
  - i. Evaluate system performance
  - ii. Test new technology or control technologies.
  - iii. Perform diagnostic testing.
  - iv. Perform other activities to improve the performance of the Combustors.
  - v. Perform other activities to advance the state of the art for emissions controls for the Combustors



2. Load Level

MMWAC shall install, calibrate, maintain, and operate a steam flowmeter on each unit and meet the following:

- a. Continuously measure and record the measurements of steam in pounds per hour.
- b. Calculate the steam flow in 4-hour block averages
- c. Calculate the steam flow rate using methods in “ASME Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991),” Section 4.
- d. Design, construct, install, calibrate and use nozzles or orifices for flow rate measurements, using the recommendations in “ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters,” 6<sup>th</sup> Edition (1971)
- e. Two weeks prior to each dioxin/furan stack test, or at least once per year, calibrate all signal conversion elements associated with steam flow measurements according to the manufacturer instructions.  
[40 CFR Part 60, Subpart BBBB]
- f. The maximum demonstrated municipal waste combustor unit load shall be determined during each subsequent annual performance test during which compliance with the dioxin/furan emission limit is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.  
[MEDEP Chapter 140, BPT]

3. Baghouse Inlet Temperature

MMWAC shall install, calibrate, maintain and operate a device to continuously measure the temperature of the flue gas stream at the inlet of the baghouse.

[40 CFR Part 60, Subpart BBBB]

The maximum demonstrated particulate matter control device temperature shall be determined during each subsequent annual performance test during which compliance with the dioxin/furan emission limit is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved. At no time shall the temperature of the flue gas stream at the inlet of the baghouse exceed 450°F.

[MEDEP Chapter 140, BPT]

4. Carbon Injection Rate

MMWAC shall meet the following requirements for the carbon injection system:

- a. Select a carbon injection system operating parameter that can be used to calculate carbon feed rate.
- b. Determine the average carbon feed rate in pounds per hour during each mercury stack test. Also, determine the average operating parameter level that correlates to the carbon feed rate. Establish a relationship between the operating parameter and the carbon feed rate in order to calculate the carbon feed rate based on the operating parameter level.
- c. Continuously monitor the selected operating parameter during all periods when the unit is operating and combusting waste and calculate the 8-hour block average carbon feed rate in pounds per hour, based on the selected operating parameter. When calculating the 8-hour block average, exclude hours when the unit is not operating and include hours when the unit is operating but the carbon feed system is not working correctly.

[40 CFR Part 60, Subpart BBBB]

5. Data Requirements

MMWAC shall collect the minimum amount of monitoring data required in accordance with 40 CFR Part 60, Subpart BBBB, §60.1825.

6. Unit Combustion Temperature

MMWAC shall maintain minimum municipal waste combustion conditions of 1800°F and 1 second flue gas retention time (based on a 4-hour average). These operating conditions shall be verified by the installation and operation of a pyrometer and continuous recorder at a location representative of at least 1 second flue gas retention time.

[MEDEP Chapter 140, BPT] **Enforceable by State-only**

7. Parameter Monitor Requirements

Each parameter monitor must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

R. Other Monitoring Requirements

The natural gas fired into each unit shall be monitored by a fuel totalizers operated in accordance with the manufacturer's specifications.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

(15) **Operating Practices**

Each Combustor shall meet the following operating practice standards:

A. Over a 4-hr block period, each Combustor operating load level shall not exceed 110% of the maximum demonstrated Combustor load level measured as steam flow or feed water flow demonstrated during the most recent PCDD/PCDF testing, except for the 2 weeks prior to and during PCDD/PCDF testing, or if waived by the Department for purposes of evaluating system performance, testing new technology or control technologies, or diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. "Maximum demonstrated municipal Combustor load" means the highest 4-hr arithmetic average Combustor load achieved during 4 consecutive hours during the most recent PCDD/PCDF performance test demonstrating compliance with the applicable limit for PCDD/PCDF.

[40 CFR Part 60, Subpart BBBB]

B. The 4-hour block average fabric filter inlet temperature shall not exceed 17°C above the maximum demonstrated particulate matter control device inlet temperature as determined during PCDD/PCDF testing, except for the 2 weeks prior to and during PCDD/PCDF testing, or if waived by the Department for purposes of evaluating system performance, testing new technology or control technologies, or diagnostic testing, or related activities for the purpose of improving facility performance of advancing the state-of-the-art for controlling facility emissions.

"Maximum demonstrated particulate matter control device inlet temperature" means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent PCDD/PCDF performance test demonstrating compliance with the applicable limit for PCDD/PCDF.

[40 CFR 60, Subpart BBBB]

C. MMWAC shall maintain an 8-hour block average carbon feed rate at or above the highest average level established during the most recent PCDD/PCDF test, except for the 2 weeks prior to and during the annual mercury testing, or if waived by the Department for purposes of evaluating system performance, testing new technology or control technologies, or diagnostic testing, or related

activities for the purpose of improving facility performance of advancing the state-of-the-art for controlling facility emissions.

MMWAC shall evaluate the total carbon usage for each calendar quarter. The total amount of carbon purchased and delivered to the facility must be at or above the required quarterly usage of carbon. The required quarterly carbon usage may be evaluated on a per Combustor basis. Calculation of the required quarterly usage of carbon shall be performed in accordance with 40 CFR Part 60, Subpart BBBB, Section 60.1935(f), Equation 4 or 5.

[40 CFR Part 60, Subpart BBBB]

D. Pit Venting [MEDEP, Chapter 140, BPT] **Enforceable by State-only**

1. MMWAC shall operate primary and secondary fans to move air from the pit, and to provide combustion air and destroy odors emanating from the MSW. During periods that one or both of the Combustors are not in operation, the induced draft fans will continue to operate allowing a slight negative pressure in the pit to vent some or all of the pit air to be vented through the primary and secondary ducts, through the Combustor, and out the stack. During periods when MSW is not being received, the truck entry doors shall remain in the closed position except when operating conditions require they be open to permit rolling stock or trailers to move in or out of the building.
2. MMWAC shall not use the bunkers as a waste storage area during times of prolonged facility outages or maintenance. There shall be no outside storage of MSW.

E. Smoke Ventilators [MEDEP, Chapter 140, BPT] **Enforceable by State-only**

1. MMWAC shall maintain three (3) smoke ventilators at the facility in locations as have been deemed necessary by the Auburn Fire Department in case of an emergency.
2. For all smoke ventilators, MMWAC shall maintain the smoke ventilators in the weather-tight closed position at all times and operated only in the event of an emergency.

(16) **Ash Handling System**

- A. MMWAC shall not discharge to the atmosphere visible emissions of combustion ash from the ash conveying system (including conveyor transfer points and building or enclosures of ash conveying systems and storage areas) in excess of 5 percent of the observation period (i.e., 9 minutes in any 3-hour period).

[MEDEP, Chapter 121]

- B. The following performance test shall be used for determining compliance with the fugitive ash emission limit on the ash load-out building:  
[MEDEP, Chapter 121]
1. EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the Combustors to the area where ash is stored or loaded into containers or trucks.
  2. The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with the fugitive ash limit.
  3. MMWAC shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- C. Fugitive ash visible emission limitations do not cover visible emissions discharged inside buildings or enclosures of ash conveying systems or visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems; and do not apply during maintenance and repair of ash conveying systems.  
[MEDEP, Chapter 121]
- D. Ash from Combustor shall be sufficiently conditioned with water or transported in sealed containers so as to prevent fugitive emissions.  
[MEDEP, Chapter 140, BPT] **Enforceable by State-only**
- E. All ash and non-combustible materials culled from the ash handling system shall be sufficiently conditioned with water to render it dust-free, or shall be stored in covered containers or in a leak tight enclosure so as to prevent fugitive emissions.  
[MEDEP, Chapter 140, BPT]
- (17) **Lime Silo**
- A. MMWAC shall maintain and operate a baghouse to control emissions during lime silo filling operations. MMWAC shall not conduct filling operations without the proper use of the baghouse.  
[MEDEP, Chapter 140, BPT] **Enforceable by State-only**
  - B. MMWAC shall maintain monthly records of the quantity of lime loaded to the silo.  
[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

C. Visible emissions from the lime silo baghouse shall not exceed an opacity of 10% based on a six (6) minute block average basis.  
 [MEDEP, Chapter 140, BPT]

(18) **Insignificant Diesel Engine Sulfur Content** [MEDEP Chapter 140, BPT]  
 The diesel fuel fired in the Emergency Diesel Generator and the Diesel Fire Pump shall not exceed 0.05% sulfur by weight. Compliance shall be based on documentation through supplier fuel records indicating the percent sulfur by weight of the fuel.

(19) **Units Containing Ozone Depleting Substances**  
 When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.  
 [40 CFR, Part 82, Subpart F]

(20) **Solvent Degreasers**  
 MMWAC shall label the parts washer with operational standards, equip the washer with cover if vapor pressure >15 mmHG at 100°F, close cover when not in use, drain parts for 15 seconds or longer, shall not degrease porous material, keep drafts < 40 m/minute, repair leaks, and keep records of solvent added and removed.  
 [MEDEP, Chapter 130]

(21) **Stack Testing**  
 A. Compliance with the limits in Condition 14(E) shall be demonstrated by a stack test in accordance with this license:

Pollutant	Limits	Method*	Schedule	Enforceability
PM	mg/dscm @ 7% O <sub>2</sub>	Method 5	Annually	-
PM <sub>10</sub>	mg/dscm @ 7% O <sub>2</sub>	Method 201	When requested by the Department**	<b>Enforceable by State-only</b>
SO <sub>2</sub>	ppmvd @ 7% O <sub>2</sub>	Method 6	When requested by the Department	<b>Enforceable by State-only</b>
NO <sub>x</sub>	ppmdv @ 7% O <sub>2</sub>	Method 7	When requested by the Department	<b>Enforceable by State-only</b>
CO	ppmdv @ 7% O <sub>2</sub>	Method 10	When requested by the Department	<b>Enforceable by State-only</b>
VOC	ppmdv @ 7% O <sub>2</sub>	Method 25A	When requested by the Department	<b>Enforceable by State-only</b>
HCl	ppmdv @ 7% O <sub>2</sub>	Method 26	Annually***	-
Pb	mg/dscm @ 7% O <sub>2</sub>	Method 29	Annually***	-
Cd	mg/dscm @ 7% O <sub>2</sub>	Method 29	Annually***	-

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Hg	mg/dscm @ 7% O <sub>2</sub>	Method 29	Annually***	-
PCDD/PCDF	ng/dscm @ 7% O <sub>2</sub>	Method 23	Annually***	-

Pollutant	Limits	Method*	Schedule	Enforceability
Sb, As, Be, Cr (hex), Cr (total), Cu, Flourides (as HF), Formaldehyde, Ni, Se, and Zn	lb/hr	Method 29	When requested by the Department	<b>Enforceable by State-only</b>
Sulfur acid mist	lb/hr	Method 8	When requested by the Department	<b>Enforceable by State-only</b>

\* Test Methods are in accordance with 40 CFR Part 60, Appendix A or as approved by the Department.[MEDEP, Chapter 121]

\*\* MMWAC shall conduct a stack test for PM<sub>10</sub> if the stack test results for PM show that the emissions are greater than 80% of the emission limit. [MEDEP, Chapter 140, BPT]

\*\*\* See Condition 21(E) for alternate testing schedules.

B. For Combustors #1 and #2, MMWAC shall conduct performance testing on each effluent, or the combined effluent, as applicable.  
 [MEDEP, Chapter 121]

C. The procedures and test methods used to determine compliance with the emission limits for particulate matter, cadmium, lead, opacity, fugitive ash, mercury, dioxin/furan, and hydrogen chloride shall be in accordance with Chapter 121 of the Department’s regulations and 40 CFR Part 60 Subpart BBBB.  
 [40 CFR Part 60, Subpart BBBB]

D. MMWAC shall conduct a performance test for compliance with the emission limits for particulate matter, cadmium, lead, mercury, dioxin/furan, and hydrogen chloride on an annual basis (no later than 13 calendar months following the previous performance test).  
 [40 CFR Part 60, Subpart BBBB]

E. If a stack test for a given pollutant over 3 consecutive years the facility is in compliance with the emission limit, the next stack test for that pollutant is not required for the next two years. However, another stack test must be completed within 36 months of the anniversary date of the third consecutive stack test that demonstrated compliance with the emission limit.

If a stack test shows noncompliance with an emission limit, the annual stack test for that pollutant must be performed annually until all stack tests over 3 consecutive years show compliance with the emission limit for that pollutant.  
 [40 CFR Part 60, Subpart BBBB]

F. Dioxin/Furan emissions testing may be performed less often if the combustion units have demonstrated levels of dioxin/furan emissions less than or equal to 30 ng/dscm (total mass) for two consecutive years. In this case, an annual stack test may be performed on only one unit per year. Once the testing sequence has been established, it must not be changed without the approval of the Department.



If any annual stack test indicates levels of dioxin/furan emissions greater than 30 ng/dscm (total mass), all subsequent stack tests on all units shall be performed on an annual basis. When the units can demonstrate dioxin/furan emissions levels less than or equal to 30 ng/dscm (total mass) for two consecutive years for all the units at the facility, the previous alternating testing schedule may be resumed.  
[40 CFR Part 60, Subpart BBBB]

- G. When determining percent reductions for mercury and hydrogen chloride emissions, both inlet and outlet concentrations of the control device shall be measured during stack testing.  
[MEDEP, Chapter 121]
- H. Stack test results shall be submitted to the Department in accordance with MEDEP Chapter 121.  
[MEDEP, Chapter 121]

**(22) Operator Training and Certification** [40 CFR Part 60, Subpart BBBB]

- A. Each chief facility operator and shift supervisor must obtain and maintain a current provisional operator certification QRO-1-1994 through the ASME or a current provisional operator certification through a State approved program.
- B. At least one fully certified chief facility operator, fully certified shift supervisor, or a provisionally certified chief facility operator or provisionally certified shift supervisor who is scheduled to take the full certification exam, must be at the facility during operations by the timetable set forth in 40 CFR 60.1675. If one of the above persons leave the facility during their operating shift, a provisionally certified control room operator who is on-site at the facility may fulfill the above requirements.
- C. MMWAC shall establish a program in accordance with 40 CFR 60.1660 to review the operating manual with each person who has responsibilities affecting the operation of the units including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

Initial training shall be conducted prior to the day the person assumes responsibilities affecting Unit operation. Training is required annually following the initial training.

- D. MMWAC must have a site-specific operating manual by the timetable set forth in 40 CFR 60.1660. The manual shall be updated and reviewed annually, and all

persons whose responsibilities affect the operation of the facility must be familiar with this document. The manual shall contain the following:

1. A summary of the applicable standards in the facility's air emission license;
2. A description of basic combustion principles applicable to the Combustors;
3. Procedures for receiving, handling, and feeding municipal solid waste;
4. Combustors startup, shutdown, and malfunction procedures;
5. Procedures for maintaining proper combustion air supply levels;
6. Procedures for operating the Combustors within the standards established in the air emission license;
7. Procedures for responding to periodic upset or off-specification conditions;
8. Procedures for minimizing particulate matter carryover;
9. Procedures for handling ash;
10. Procedures for monitoring Combustors emissions: and
11. Reporting and recordkeeping procedures.

E. The operating manual shall be kept in a readily accessible location for all persons required to undergo training. The operating manual and records of training shall be available for inspection by the MEDEP or EPA.

(23) **Start-up, Shutdown, Malfunction (SSM)**

Compliance and performance testing standards apply at all times, except during periods of start-up, shutdown and malfunction.

A. Startup, shutdown or malfunction periods are limited to 3 hours per occurrence in accordance with 40 CFR Part 60.1710. A maximum of three (3) hours of test data can be dismissed from compliance during periods of start-up, shutdowns and malfunction.

[MEDEP Chapter 140, BPT]

1. **Start-up, shutdown and malfunction:** MMWAC shall include in the operating manual a written start-up, shutdown and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of start-up, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standards. The plan shall identify all routine or otherwise predictable CMS malfunctions. This plan shall be developed by the owner or operator by the timetable set forth in 40 CFR 60.1660.
2. During periods of startup, shutdown, and malfunction, MMWAC shall operate and maintain such source (including associated air pollution control

equipment) in accordance with the procedures specified in the start-up, shutdown and malfunction plan.

3. When actions taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown and malfunction plan, MMWAC shall maintain records for that event that demonstrate that the procedures specified in the plan were followed. These records shall include records of the occurrence and duration for each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control equipment.
  4. If an action taken during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the startup, shutdown, or malfunction plan, MMWAC shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event.
  5. MMWAC shall keep the written start-up, shutdown, and malfunction plan on record after it is developed and shall make it available for review to EPA or the Department upon request. In addition, if the startup, shutdown, and malfunction plan is revised, MMWAC shall keep previous versions of the plan on record to be made available for inspection upon request.
  6. If the startup, shutdown, and malfunction plan fails to address an event that meets the characteristics of a malfunction but was not included in the plan at the time the plan was developed, MMWAC shall revise the start-up, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment.
- B. "Startup" is the period when the Combustor begins Continuous Burning of MSW and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-MSW fuel, and no MSW is being fed to the combustor.  
[MEDEP, Chapter 140, BPT]
- C. "Continuous Burning" is the continuous, semicontinuous, or batch feeding of MSW for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of MSW solely to provide thermal protection of the grate during the startup period when MSW is not being fed to the grate is not considered to be continuous burning.

[MEDEP, Chapter 140, BPT]

- D. Operations during startup, shutdown, and malfunction periods will occur in accordance with the startup, shutdown, and malfunction plan contained in the source operating manual.  
[MEDEP, Chapter 140, BPT]
- E. “Warm-up” is defined as the period before startup commences, when natural gas is being fired in the Combustor.  
[MEDEP, Chapter 140, BPT]
- F. The stack O<sub>2</sub> levels during Warm-up and Startup that exceed 14.0% may be replaced with a value of 14.0. MMWAC is licensed to recalculate the hourly ppmdv averages for SO<sub>2</sub>, NO<sub>x</sub>, and CO if the observed stack oxygen is greater than 14.0% during Warm-up and Startup and to use the recalculated number for compliance purposes. Subsequent to Startup, the use of actual O<sub>2</sub> readings will be resumed. Emission concentrations shall be corrected to 7.0% oxygen (dry basis). [40 CFR Part 60, Subpart BBBB, MEDEP, Chapter 140, BPT]
- (24) **Recordkeeping Requirements** [MEDEP, Chapters 121, 130, 140 & 40 CFR Part 60, Subpart BBBB]

MMWAC shall maintain records of the following information, for each emission unit for a period of at least 6 years:

- A. The calendar date of each record.
- B. The emission concentrations and parameters measured using continuous monitoring systems as specified under the following paragraphs.
1. The measurements specified in the following paragraphs shall be recorded and be available for submittal to the Department or review on-site by an inspector.
    - a. All 6-minute average opacity levels;
    - b. All 1-hour average SO<sub>2</sub> emission concentrations;
    - c. All 1-hour average NO<sub>x</sub> emission concentrations;
    - d. All 1-hour average CO emission concentrations
    - e. All 1-hour average load levels of each Combustor;
    - f. All 1-hour average flue gas temperatures at the inlet of the fabric filter;
  2. The average concentrations and percent reductions, as applicable, specified in the following paragraphs shall be computed and recorded, and shall be available for submittal to the Department or review on-site by an inspector.

- a. All 24-hour daily block geometric average SO<sub>2</sub> emission concentrations or all 24-hour daily geometric average percent reductions of sulfur dioxide emissions.
  - b. All 24-hour daily block arithmetic average NO<sub>x</sub> emission concentrations.
  - c. All 4-hour block or 24-hour daily block arithmetic average CO emission concentrations.
  - d. All 4-hour block arithmetic average load levels for each Combustor;
  - e. All 4-hour block arithmetic average flue gas temperature at the inlet of the fabric filter;
- C. Identification of the calendar dates and averaging periods when any of the average emission concentrations, percent reductions, operating parameters recorded, or opacity levels recorded are above the applicable limits, with reasons for such exceedances and a description of the corrective action taken.
- D. Identification of the calendar dates for which the minimum number of hours of any of the data specified below in (1) through (5) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken:
1. SO<sub>2</sub>emissions data;
  2. NO<sub>x</sub> emissions data;
  3. CO emissions data;
  4. Combustor load level data; and
  5. Flue gas temperature at the inlet to the fabric filter;
- E. Documentation of each time that data was excluded from the calculation of averages for any of the following:
1. SO<sub>2</sub> emissions data;
  2. NO<sub>x</sub> emissions data;
  3. CO emissions data;
  4. Combustor load level data; and
  5. Flue gas temperature at the inlet to the fabric filter;
- F. Documentation of the results of daily drift tests and quarterly accuracy determinations (in accordance with 40 CFR Part 60, Appendix F, Procedure 1) for SO<sub>2</sub>, NO<sub>x</sub> and CO continuous emissions monitoring systems.
- G. Operator Training Records:
1. For the Combustors, records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally and/or fully certified by the American Society of Mechanical Engineers (ASME) or an equivalent State-approved certification program including the dates of initial provisional and full

certification and renewal full certifications. Include in these records documentation showing current provisional and/or current full certifications.

2. For the Combustors, records showing the names of the chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustion operator training course or a State-approved equivalent course. Include in these records the dates of completion of the operator training course and documentation showing completion of the training course.
  3. Records showing the names of persons who have completed a review of the operating manual, including the date of the initial review and the dates of subsequent annual reviews.
  4. Records showing when a certified operator is temporarily offsite in accordance with 40 CFR Part 60, Subpart BBBB, §60.1840 (e).
- H. The test reports documenting the results of all performance tests listed below in (1) through (3) shall be recorded along with supporting calculations.
1. The results of all performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
  2. The results of all subsequent dioxin/furan performance tests, which shall include the maximum demonstrated load of the Combustors and maximum temperature at the inlet of the fabric filter.
  3. The results of all performance tests to determine emissions of antimony, arsenic, beryllium, chromium (hexavalent), chromium (total), copper, flourides (as HF), formaldehydes, nickel, selenium, sulfuric acid mist, and zinc.
- I. Carbon Injection Records
1. Records of average carbon feed rate
    - a. Average carbon feed rate in pounds per hour during all stack tests for mercury emissions, including supporting calculations.
    - b. Average operating level of the operating parameter during all stack tests for mercury emissions, including supporting data that document the relationship between the operating parameter and the carbon feed rate.
    - c. All 8-hour block average carbon feed rates in pounds per hour calculated from the monitored operating parameter
    - d. Total carbon purchased and delivered to MMWAC for each calendar quarter.
    - e. Required quarterly usage of carbon for the facility as calculated in accordance with 40 CFR Part 60, Subpart BBBB, Section 60.1935(f), Equation 4 or 5.
  2. Records of low carbon feed rates

- a. The calendar dates when the average carbon feed rate over an 8-hour block was less than the average carbon feed rates determined during the most recent stack test for mercury emissions.
  - b. Reasons for the low carbon feed rates
  - c. Corrective actions taken to meet the 8-hour average carbon injection rate requirement.
3. Records of minimum carbon feed rate data
    - a. Calendar dates for which the minimum amount of carbon feed rate data was not collected.
    - b. Reasons the data was not collected.
    - c. Corrective actions taken to get the required amount of data.
  4. Records of exclusions  
Documentation of each time data was excluded from the calculation of the average carbon feed rates and the reason the data were excluded.
- J. For all the equipment parameter monitoring and recordkeeping required by this license, records shall include:
1. Documentation which shows monitor operational status during all source operating time (steam flow, baghouse inlet temperature, carbon injection rate and unit combustion temperature); and
  2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Department upon request.
- K. MMWAC shall maintain monthly records of natural gas use. Fuel use records shall indicate the quantity of fuel consumed.
- L. MMWAC shall maintain annual records of all solvent added to and removed from the solvent degreasers.
- M. For all licensed pollution control equipment MMWAC shall maintain a log detailing all routine and non-routine maintenance on each fabric filter and spray dryer absorber. MMWAC shall keep a log documenting the location, date, and nature of all pollution control equipment failures.
- N. All records shall be maintained on-site in either paper copy or computer readable format, unless an alternative format is approved by the Department.
- (25) **CEMS, COMS, and Parameter Monitors** [MEDEP Chapters 117 and 140, BPT]  
The CEMS, COMS, and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. MMWAC shall comply with the following:

**A. Performance Specifications**

All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix B and F and Chapter 117 of the Department's regulations at all times the unit is in operation.

1. If the continuous emission monitoring system for the gaseous emissions is recording accurate and reliable data less than 90% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
2. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction so the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
3. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with MEDEP Chapter 117.
4. MMWAC shall develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and MEDEP Chapter 117.

**B. Recordkeeping**

For all of the continuous emission monitoring (CEMS), continuous opacity monitor (COM), equipment parameter monitoring and recording, required by this license, MMWAC shall maintain records of the most current six year period and the records shall include:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and
2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.



3. For all CEMS and COMS, the records shall include:
  - a. Documentation that all CEMS and COMS are continuously accurate, reliable, and operated in accordance with applicable provisions of MEDEP Chapter 117, 40 CFR Part 60, Subpart BBBB, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
  - b. Records of emission measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS, as required by 40 CFR Part 51 Appendix P;
  - c. Upon the written request by the Department a report or other data indicative of compliance with the applicable emission standard for those periods when the CEMS or COMS were not in operation or produced invalid data. Methods allowed by 40 CFR Part 75 may be used to demonstrate compliance with applicable emission standards. Evidence indicating normal operations shall constitute such reports or other data indicative of compliance with applicable emission standards. In the event the Department does not concur with MMWAC's compliance determination, MMWAC shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data are indicative of compliance with the applicable standard; and
  - d. A 24-hour block average shall be calculated as the arithmetic average of not more than 24 one-hour block periods. Only one 24-hour block average shall be calculated for one day, beginning at midnight. A valid 24-hour block average must contain at least 12 hours during which operation occurred. Hours in which no operation occurs shall not be included in the 24-hour block average calculation.

**C. Quarterly Reporting**

MMWAC shall submit a Quarterly Report to the Bureau of Air Quality and EPA within 30 days after the end of each calendar quarter, beginning **October 30, 2002**, detailing the following for the parameter monitor (steam flow, baghouse inlet temperature, carbon injection rate and unit combustion temperature), Continuous Emission Monitoring Systems (CEMS), or Continuous Opacity Monitoring Systems (COMS) required by this license:

1. All control equipment downtimes and malfunctions;
2. All CEMS or COMS downtimes and malfunctions;
3. All parameter monitor (Unit combustion temperature, Unit load level as steam flow, Baghouse inlet temperature and Carbon injection rate) downtimes and malfunctions;
4. All excess events of emission and operational limitations set by this Order. The following information shall be reported for each excess event:
  - a. Standard exceeded;
  - b. Date, time, and duration of excess event;

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- c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
  - d. A description of what caused the excess event;
  - e. The strategy employed to minimize the excess event; and
  - f. The strategy employed to prevent recurrence.
5. A report certifying there were no excess emissions, if that is the case.

(26) **Semiannual Reporting** [40 CFR Part 60, Subpart BBBB]

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The first semiannual report is due **January 30, 2003** with subsequent semiannual reports due **July 30<sup>th</sup>** and **January 30<sup>th</sup>** of each year.

- A. Each semiannual report shall include a summary of the following items:
1. For any of the following five pollutants or parameters that exceeded the limits in this license, the calendar date of any exceedances, the reason for the exceedance and the corrective action taken
    - a. Concentration or percent reductions of SO<sub>2</sub> emissions;
    - b. Concentration of CO emissions;
    - c. Load level of each unit;
    - d. Temperature of the flue gases at the inlet of the fabric filter;
    - e. Unit combustion temperature;
    - f. Average 6-minute opacity level. The data obtained from the COM are not used to determine compliance with the limit on opacity emissions.
  2. If the results of the stack test show emissions above the limits specified in this license for dioxin/furan, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash, include a copy of the test report that documents the emission levels and the corrective actions taken
  3. Documentation of all dates when the 8-hour block average carbon feed rate (calculated from the carbon injection system operating parameter) is less than the highest carbon feed rate established during the most recent mercury stack test. Include the following:
    - a. Eight-hour average carbon feed rate;
    - b. Reasons for occurrences of low carbon feed rates;
    - c. The corrective actions taken to meet the carbon feed rate requirement;
    - d. The calendar date.
  4. Documentation of each quarter when total carbon purchased and delivered to the facility is less than the total required quarterly usage of carbon. Include the following:
    - a. The amount of carbon purchased and delivered to the plant;
    - b. The required quarterly usage of carbon;
    - c. Reasons for not meeting the required quarterly usage of carbon;
    - d. The corrective actions taken to meet the required quarterly usage of carbon;
    - e. The calendar date.
  5. The rolling 12-month total of natural gas fired into Unit 1 and Unit 2.
  6. The combined annual capacity factor for natural gas in Unit 1 and Unit 2.
  7. Summary page of the results of stack testing performed.
  8. Diesel fuel oil sulfur content of the diesel fuel burned over the past six months in the Diesel Generator and Diesel Fire Pump.
- B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form.

- (27) **Annual Compliance Certification** [MEDEP Chapter 140, BPT and 40 CFR Part 60, Subpart BBBB]

MMWAC shall submit an annual compliance certification to the Department and EPA in accordance with Condition (13) of this license. The initial annual compliance certification is due **January 30, 2003**.

The annual report shall also include the following 14 items:

- A. The results of the annual stack test, using appropriate units, for eight pollutants:
  1. Dioxin/furans
  2. Cadmium
  3. Lead
  4. Mercury
  5. Opacity
  6. Particulate matter
  7. Hydrogen chloride
  8. Fugitive ash
- B. A list of the highest average levels recorded, in the appropriate units. List those values for:
  1. SO<sub>2</sub> emissions;
  2. CO emissions;
  3. Temperature of the flue gas at the inlet of the fabric filter;
- C. The highest 6-minute opacity level measured. Base this value on all 6-minute average opacity levels recorded by the COM;
- D. The average carbon feed rates recorded during the most recent mercury stack test;
- E. The lowest 8-hour block average carbon feed rate recorded during the year;
- F. The total carbon purchased and delivered to the facility for each calendar quarter;
- G. The required quarterly carbon usage at the facility calculated using equation 4 or 5 in 40 CFR Part 60, Subpart BBBB, §60.1935(f);
- H. The total number of days that MMWAC did not obtain the minimum number of hours of data for the following. Include the reasons the data was not collected and the corrective actions taken to obtain the data in the future:
  1. SO<sub>2</sub> emissions;
  2. CO emissions;
  3. Load level of each unit;
  4. Temperature of the flue gas at the inlet of the fabric filter
  5. Carbon feed rate;
  6. Unit combustion temperature;
- I. The number of hours of excluded data from the calculations of average levels (including the reasons for excluding it). Include the following data:
  1. SO<sub>2</sub> emissions;
  2. CO emissions;
  3. Load level of each unit;

4. Temperature of the flue gas at the inlet to the fabric filter;
5. Carbon feed rate;
6. Unit combustion temperature;
- J. A notice of an intent to begin a reduced stack testing schedule for dioxins/furans emissions during the following calendar year if eligible for alternative scheduling (40 CFR Part 60, Subpart BBBB §60.1795(b)).
- K. A notice of an intent to begin a reduced stack testing schedule for other pollutants during the following calendar year if eligible for other scheduling (40 CFR Part 60, Subpart BBBB §60.1795(a)).
- L. A summary of any emission or parameter level that did not meet the limits specified in this license;
- M. A summary of the data in Condition 28 (A) through (G) of this license from the year preceding the reporting year which gives the Department and EPA a summary of the performance of the Combustors over a 2-year period.
- N. Documentation of periods when all certified chief facility operators and certified shift supervisors are offsite for more than 12 hours.

(28) **A. Annual Emission Statement**

In accordance with MEDEP Chapter 137, MMWAC shall annually report to the Department, no later than **September 1**, or 60 days from the date the emission statement forms are mailed from the Department, whichever is earlier, the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;  
or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

Phone: (207) 287-2437

[MEDEP, Chapter 140, BPT]

**B. Biennial Emission Statement**

In accordance with MEDEP Chapter 137, MMWAC shall report every two years (2002, 2004, etc.), no later than **September 1**, or 60 days from the date the emission statement forms are mailed from the Department, whichever is earlier, to the Department the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137. The applicable toxics are listed in Appendix A of MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

Phone: (207) 287-2437

[MEDEP, Chapter 140, BPT]

- (29) The licensee is subject to the following State regulations.

<u>Origin and Authority</u>	<u>Requirement Summary</u>
Chapter 102	Open Burning
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 116	Prohibited Dispersion Techniques

- (30) **Certification by a Responsible Official**

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Department must be signed by a responsible official.

[MEDEP Chapter 140]

- (31) MMWAC shall pay the annual air emission license fee within 30 days of July 30th of each year. Pursuant to Title 38 §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under Title 38 §341-D, subsection 3.

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

DONE AND DATED IN AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 25, 1996

Date of application acceptance: October 28, 1996

Date filed with Board of Environmental Protection \_\_\_\_\_

This Order prepared by Mark E. Roberts, Bureau of Air Quality