Part 70 Operating Permit

Permit Number: **9431-089-0005-V-03-0** **Effective Date:**

Facility Name: **Centers for Disease Control and Prevention - Roybal**

Facility Address: 1600 Clifton Road N.E.
Atlanta, Georgia, 30333, Dekalb County

Mailing Address: 1600 Clifton Road N.E.
Atlanta, Georgia 30333

Parent/Holding Company: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Facility AIRS Number: 04-13-089-00005

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

> The operation of a facility which carries out biological and disease prevention research as well as agency program administration.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. Unless modified or revoked, this Permit expires five years after the effective date indicated above.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above, for any misrepresentation made in Title V Application No. TV-22066 signed on August 1, 2013, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of supporting data, or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **76** pages.

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Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.1 Site Determination

There are no applicable issues with regard to the site determination. There are no other facilities which could possibly be contiguous or adjacent and under common control.

1.2 Previous and/or Other Names

Centers for Disease Control and Prevention - Clifton

1.3 Overall Facility Process Description

The Centers for Disease Control and Prevention (CDC) – Roybal is a large campus of buildings that house many of the administration and research functions of the U.S. CDC. The facility's building space contains a mix of laboratories and administrative offices. CDC is home to several of the highest-level biohazard laboratories in the country. CDC has Biosafety Levels 1 through 4 laboratories. Of the four levels, Biosafety Level 4 requires the highest level of containment[1], which requires strict adherence to procedures for all materials entering and leaving laboratories, whether in a solid, liquid, or gaseous form. The environment in the laboratories requires once-through ventilation systems which require a large amount of peak heating capacity and peak cooling and dehumidifying capability sufficient for winter and summer conditions, respectively. The need for very reliable energy and heating capacity dictate that they have 100% redundancy in heating and electrical generation equipment, which includes backup sources of fuel to be able to operate independently from outside sources of fuel and power for extended periods of time. The CDC uses distillate fuel oil as their backup fuel.

The primary sources of criteria pollutant emissions from the facility are the boilers, which supply heat to the buildings and steam to the autoclaves used in research; and the generators, which are used for emergency back-up power. Incinerators and research activities also generate combustion emissions.

Currently, the facility uses 9 boilers (Source Codes: BL01, BL02, BL03, BL04, BL10, and four insignificant boilers [0.6 MMBtu/hr each]) with a total heat input capacity of 360.62 MM Btu/hr. Each boiler primarily fires natural gas, and has the ability to fire distillate fuel oil as a backup fuel. The boilers (Source Codes: BL01, BL04, and BL10) are equipped with Low-NO_X burners.

Currently, the facility uses 15 emergency diesel generators (Source Codes: CG01 through CG04 and CG07 through CG17) to supply electricity in the event of a power outage. All generators fire exclusively on diesel and are operated only during emergency situations for a maximum of 200 hours per year each.

[1] Biosafety Level 4 facilities are designed to allow laboratory workers to work with dangerous and exotic agents that pose a high individual risk of aerosol-transmitted laboratory infections and life-threatening diseases (examples: Ebola Zaire, Sine Nombre virus, and Rift Valley Fever). Release of these infectious agents outside the facility would pose problems to the public; therefore the facility makes extensive use of disinfectant and HEPA filtration systems.

The autoclaves and three incinerators (Source Codes: INC1, INC3, and INC4) are used to treat pathological waste generated during research. The operation of the incinerators (Source Codes: INC1 and INC4) are restricted so that no more than 10 percent of the total waste burned, on a quarterly basis, is hospital/medical/infectious (HMI) waste. Non-HMI waste burned in the incinerators (Source Codes: INC1 and INC4) must not contain any chlorine-containing plastics except the plastic bags that wrap or bag the pathological waste. This ensures that the facility is synthetic minor under Title V for emissions of hazardous air pollutants. The incinerator (Source Code: INC3) does not have a limit on the amount of HMI waste it can incinerate and is referred to as a Hospital/Medical/Infections Waste Incinerator (HMIWI). The INC3 is equipped with a rotary atomizing wet scrubber. The facility is requesting to begin incinerating in INC3 narcotics and other contraband confiscated by authorized governmental agencies.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
BL01	Babcock and Wilcox Water Tube Boiler, field erected in 2001; in Building #10. Low NO_X burners, Coen Model 870, QLN-3.4. 80,000 lbs/hr steam @125 psig 96.53 MMBtu/hr firing NG, and 93.16 MMBtu/hr firing DFO)	40 CFR 60, Subpart A 40 CFR 60, Subpart Dc 391-3-1-.02(2)(d)2.(ii) 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(lll)	3.2.1, 3.2.2, 3.2.4, 3.2.6, 3.3.1, 3.3.2, 3.4.4, 3.4.5, 5.2.1, 5.2.3, 6.1.7, 6.2.1, 6.2.4, 6.2.5, 6.2.7, 6.2.8, 6.2.12, 6.2.14	None	None
BL02	Babcock and Wilcox Water Tube Boiler; model FJ2737; field erected in 1958; in Building #10. 40,000 lbs/hr steam @160 psig 56 MMBtu/hr Firing NG and DFO	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(d)1.(ii) 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(yy)1.	3.2.5, 3.4.1, 3.4.3, 5.2.4, 6.1.7, 6.2.11, 6.2.14	None	None
BL03	Babcock and Wilcox Water Tube Boiler; model FJ2737; field erected in 1958; in Building #10. 40,000 lbs/hr steam @160 psig 56 MMBtu/hr Firing NG and DFO	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(d)1.(ii) 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(yy)1.	3.2.5, 3.4.1, 3.4.3, 5.2.4, 6.1.7, 6.2.11, 6.2.14	None	None
BL04	Babcock and Wilcox Water Tube Boiler; model 650-DAF24; field erected in 1965; in Building #10. Refurbished and modified in 2001 by replacing 3 old burners with one new burner (NG) made by Coen, Model DSF 2000-SB-UV. The natural gas burner is low NO_X. Also included in the modification was Flue Gas Recirculation (FGR), which reduces NO_X for both NG and fuel oil combustion. 40,000 lbs/hr steam @160 psig 52.85 MMBtu/hr firing NG, and 50.46 MMBtu/hr firing DFO	40 CFR 60, Subpart A 40 CFR 60, Subpart Dc 391-3-1-.02(2)(d)2.(ii) 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(yy)1.	3.2.1, 3.2.2, 3.2.4, 3.3.1, 3.3.2, 3.4.4, 5.2.1, 5.2.2, 5.2.4, 6.1.7, 6.2.1, 6.2.4, 6.2.5, 6.2.7, 6.2.8, 6.2.14	None	None
BL10	Babcock and Wilcox Water Tube Boiler, contract number: model 201-3356/103-88M, field erected in 2002; in Building #14. Low NO_X burners: Coen model QLN-870 80,000 lbs/hr steam @125 psig 96.84 MMBtu/hr firing NG and 93.08 MMBtu/hr firing DFO	40 CFR 60, Subpart A 40 CFR 60, Subpart Dc 391-3-1-.02(2)(d)2.(ii) 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(lll)	3.2.1, 3.2.2, 3.2.4, 3.2.6, 3.3.1, 3.3.2, 3.4.4, 3.4.5, 5.2.1, 5.2.3, 6.1.7, 6.2.1, 6.2.4, 6.2.5, 6.2.7, 6.2.8, 6.2.12, 6.2.14	None	None
CG01	Diesel engine driven 1,825 KWe generator in Building #10, model 3516B, made by Caterpillar, used for emergency service, installed 1998, firing diesel fuel. 2,628 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG02	Diesel engine driven 1,825 KWe generator in Building #10, model 3516B, made by Caterpillar, used for emergency service, installed in 1998, firing diesel fuel. 2,628 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
CG03	Diesel engine driven 1,825 KWe generator in Building #10, model 3516B, made by Caterpillar, used for emergency service, installed in 1998, firing diesel fuel. 2,628 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG04	Diesel engine driven 1,825 KWe generator in Building #10, model 3516B, made by Caterpillar, used for emergency service, installed in 1998, firing diesel fuel. 2,628 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG07	Diesel engine driven 400 KWe generator next to Building #15, model 3408, made by Caterpillar, used for emergency service (installed in 1987) firing diesel fuel. 563 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.9, 6.2.14, 6.2.15	None	None
CG08	Diesel engine driven 1,400 KWe generator next to Building #16, model SR4-3516, made by Caterpillar, used for emergency service (installed in 1995) firing diesel fuel. 1,971 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG09	Diesel engine driven 1,400 KWe generator next to Building #16, model SR4-3516, made by Caterpillar, used for emergency service (installed in 1995) firing diesel fuel. 1,971 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG10	Diesel engine driven 2,250 KWe (standby service rating) generator located at Building 21, model 3516, made by Caterpillar, used for emergency service, installed in 2004, firing diesel fuel. 3,214 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG11	Diesel engine driven 2,250 KWe (standby service rating) generator located at Building 21, model 3516, made by Caterpillar, used for emergency standby service, installed in 2004, firing diesel fuel. 3,214 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG12	Diesel engine driven 2,250 KWe (standby service rating) generator located at Building 14, model 3516, made by Caterpillar, used for emergency standby service, installed in 2005, firing diesel fuel. 3,214 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG13	Diesel engine driven 2,250 KWe (standby service rating) generator located at Building 14, model 3516, made by Caterpillar, used for emergency standby service, installed in 2005, firing diesel fuel. 3,214 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None
CG14	Diesel engine driven 2,250 KWe (standby service rating) generator located at Building 14, model 3516, made by Caterpillar, used for emergency standby service, installed in 2005, firing diesel fuel. 3,214 HP.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.2.3, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.6, 6.2.7, 6.2.9, 6.2.14, 6.2.15	None	None

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
CG15	Diesel engine driven 2,250 KWe generator for Building 10 loads, model 3516, made by Caterpillar, used for emergency service, installed in 2007, firing diesel fuel. 3,017 HP.	40 CFR 60, Subpart A 40 CFR 60, Subpart IIII 40 CFR 63, Subpart A 40 CFR 63, Subpart ZZZZ 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.3.9 through 3.3.15, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.3, 6.2.6, 6.2.7, 6.2.10, 6.2.13, 6.2.14, 6.2.15	None	None
CG16	Diesel engine driven 2,250 KWe generator for Building 10 loads, model 3516, made by Caterpillar, used for emergency service, installed in 2007, firing diesel fuel. 3,017 HP.	40 CFR 60, Subpart A 40 CFR 60, Subpart IIII 40 CFR 63, Subpart A 40 CFR 63, Subpart ZZZZ 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.3.9 through 3.3.15, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.3, 6.2.6, 6.2.7, 6.2.10, 6.2.13, 6.2.14, 6.2.15	None	None
CG17	Diesel engine driven 2,250 KWe generator for Building 10 loads, model 3516, made by Caterpillar, used for emergency service, installed in 2007, firing diesel fuel. 3,017 HP	40 CFR 60, Subpart A 40 CFR 60, Subpart IIII 40 CFR 63, Subpart A 40 CFR 63, Subpart ZZZZ 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2. 391-3-1-.02(2)(mmm)	3.2.1, 3.3.9 through 3.3.15, 3.4.1, 3.4.6, 5.2.1, 6.1.7, 6.2.3, 6.2.6, 6.2.7, 6.2.10, 6.2.13, 6.2.14, 6.2.15	None	None
INC1	Incinerator at Building #15, made by Simonds, intermittent mode design. Installed in 1988. 75 lb / hr @ 8,500 Btu per lb, primary burners: 0.6 MMBtu/hr firing NG secondary burner: 0.6 MMBtu/hr firing NG	391-3-1-.02(2)(c)	3.2.7, 3.2.8, 3.4.2, 3.4.7, 3.4.8, 5.2.5, 5.2.6, 6.1.7, 6.2.16, 6.2.17, 6.2.18, 6.2.19	None	None
INC3	Incinerator at Building 18, Crawford Model CB74SW-L rated capacity of 120 lb/hr of 9500 Btu/lb medical waste. Installed in 2006. Intermittent Duty, Max loading continuous per day equals 1,000 pounds, before ash removal This unit functions as a Hospital/Medical/Infectious Waste Incinerator (HMIWI)	40 CFR 60, Subpart A 40 CFR 60, Subpart Ec 40 CFR 62, Subpart A 40 CFR 62, Subpart HHH 391-3-1-.02(2)(yy)1	3.2.9 through 3.2.24, 3.3.3 through 3.3.8, 3.4.7, 3.4.8, 3.5.1, 3.5.2, 4.2.1 through 4.2.17, 5.2.7 through 5.2.10, 6.1.7, 6.2.20 through 6.2.28	RDA1	Rotating Disc Atomizer Wet Scrubbing System, Emcotek Model: 130H-500, which includes: Quench / Pressure control System Rotating Disc Atomizer Wet Scrubber
INC4	Incinerator at Building 23, Crawford Emcotek Model CB128SW-LC rated capacity of 400 lb/hr Installed in 2009. Primary burners: two burners each 0.5 MMBtu/hr firing NG. Secondary burner: one burner 2 MMBtu/hr firing NG.	391-3-1-.02(2)(c) 391-3-1-.02(2)(yy)1	3.2.7, 3.2.8, 3.4.2, 3.4.7, 3.4.8, 5.2.5, 5.2.6, 6.1.7, 6.2.16, 6.2.17, 6.2.18, 6.2.19	None	None
ASH1	HMIWI ash handling	Rule 391-3-1-.02(2)(n)	3.4.7, 3.4.8	None	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

3.2.1 The Permittee shall comply with the following operating cap and nitrogen oxides (NO_X) emission limits: [391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

a. The total hours of operation of each diesel engine driven generator (Source Codes: CG08 and CG09 shall not exceed 165 hours during any twelve consecutive month period.

b. From the diesel engine driven generators (Source Codes: CG01 through CG04) combined, the emissions of NO_X shall not be in an amount equal to or exceeding 15.0 tons during any consecutive twelve-month period.

c. From the boilers (Source Codes: BL01 and BL04), combined, the emissions of NO_X shall not be in an amount equal to or exceeding 10.0 tons during any consecutive twelve-month period.

d. From the boiler (Source Code: BL10), the emissions of NO_X shall not be an amount equal to or exceeding 6.0 tons during any consecutive twelve-month period.

e. From the diesel engine driven generators (Source Codes: CG10 through CG14) combined, the emissions of NO_X shall not be in an amount equal to or exceeding 9.0 tons during any consecutive twelve-month period.

f. From the diesel engine driven generators (Source Codes: CG15 through CG17) combined, the emissions of NO_X shall not be in an amount equal to or exceeding 6.0 tons during any consecutive twelve-month period.

3.2.2 The Permittee shall not fire any fuel other than natural gas and distillate fuel oils in the boilers (Source Codes: BL01, BL04, and BL10).
[PSD Avoidance - 40 CFR 52.21, Avoidance of 40 CFR 63 Subpart JJJJJJ, 40 CFR 60.42c(d), and 391-3-1-.02(2)(g) 2.(subsumed)]

The distillate fuel oil shall not contain more than 0.5 percent sulfur by weight and shall only be burned in the boilers during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of distillate fuel oil shall not exceed a combined total of 48 hours during any calendar year. Distillate fuel oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, “Standard Specification for Fuel Oils.”

3.2.3 The Permittee shall not fire any fuel other than distillate fuel oils, as defined in Condition 3.2.2, in the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG14).
[PSD Avoidance - 40 CFR 52.21 and 391-3-1-.02(2)(g) 2.(subsumed)]

3.2.4 The Permittee shall not burn more than 957,000 gallons of distillate fuel oil in the boilers (Source Codes: BL01, BL04, and BL10) combined, during any 12 consecutive months period.
[PSD Avoidance - 40 CFR 52.21]

3.2.5 The Permittee shall not fire any fuel other than natural gas or distillate fuel oils, as defined in Condition 3.2.2, in the boilers (Source Codes: BL02 and BL03).
[391-3-1-.03(2)(c) and 391-3-1-.02(g)2.(subsumed)]

3.2.6 The Permittee shall not fire any fuel other than natural gas during the months of May through September, in the boilers (Source Codes: BL01 and BL10).
[391-3-1-.02(2)(lll)]

Incinerators INC1 and INC4

3.2.7 The Permittee shall operate each incinerator (Source Codes: INC1 and INC4) within the following parameters and operational limitations:
[391-3-1-.02(2)(iii) Avoidance, 40 CFR 60 Subpart Ec Avoidance, 40 CFR 60 Subpart CCCC Avoidance, 40 CFR 60 Subpart EEEE Avoidance, and 391-3-1-.02(2)(c)]

a. The Permittee shall restrict waste input to ensure that no more than 10% of the total waste burned, on a quarterly basis, is Hospital /Medical/ Infectious (HMI) waste, as defined by 40 CFR 60, Subpart Ec, in each of the incinerators (Source Codes: INC1 and INC4).

b. The Permittee shall maintain the primary chamber outlet temperature at a minimum of 800 degrees Fahrenheit (426.6 degrees C) in the incinerators (Source Codes: INC1 and INC4). This includes times whenever the charging door (i.e., door closest to the primary chamber) to the incinerator is open during normal charging operations.

c. The Permittee shall maintain the secondary chamber outlet gas temperature at a minimum of 1500 degrees Fahrenheit (815 degrees C), while combusting waste, in the incinerators (Source Codes: INC1 and INC4).

d. The Permittee shall not charge INC1 at greater than the mass input per hour documented during the most recent performance test which demonstrated compliance with the limitations for particulate matter and opacity given in Condition 3.4.2, or 75 pounds per hour, whichever is less.

e. The Permittee shall not charge INC4 at greater than the mass input per hour documented during the most recent performance test, which demonstrated compliance with the limitations for particulate matter and opacity given in Condition 3.4.2, or 400 pounds per hour, whichever is less.

f. The Permittee shall not charge INC1 with a total of more than 1,000 pounds before shutting the incinerator down to clean out any accumulated ash from the primary chamber.

g. The Permittee shall not charge INC4 with a total of more than 3,200 pounds before shutting the incinerator down to clean out any accumulated ash from the primary chamber.

3.2.8 The Permittee shall ensure that non-hospital/medical/infectious (non-HMI) waste (per Condition 3.2.7.a) burned in the incinerators (Source Codes: INC1 and INC4), does not include any chlorine-containing plastics except the plastic bags that wrap or bag the pathological waste. Non-HMI chlorine-containing plastics may include plastic beddings. [Hazardous Air Pollutants Major Source Avoidance]

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

3.2.9 The Permittee shall operate the scrubber with ID No. RDA1 at all times that the hospital/medical/infectious waste incinerator (HMIWI) (Source Code: INC3) is in operation as defined by Condition 3.2.14.
[391-3-1-.02(2)(a)1 and 391-3-1-.03(2)(c)]

3.2.10 The Permittee shall not discharge or cause the discharge into the atmosphere from the stack of the HMIWI (Source Code: INC3), the pollutants in excess of the amounts listed under the Emissions Limits columns in Table 1:
[40 CFR 62.14411 Table 1 and 40 CFR 62.14412 of Federal Plan Subpart HHH and NOx RACT required by 391-3-1-.02(2)(yy)1.]

Table 1 HMIWI Emission Limits

Pollutant	Emissions Limits (7% Oxygen, dry basis)				Testing Permit Conditions
	Method† number 1		Method† number 2		
	Limitation Value	Units of Standard	Limitation Value	Units of Standard	
Opacity	6	%	n/a	n/a	4.2.4.a
PM	0.029	gr/dscf	n/a	n/a	4.2.4.b, 4.2.5, 4.2.6, 4.2.7, 4.2.12, 4.2.13
CO	20	ppmv	n/a	n/a	4.2.4.c, 4.2.5, 4.2.6, 4.2.7
NO_X*	190	ppmv	n/a	n/a	n/a
SO_2*	4.2	ppmv	n/a	n/a	n/a
Dioxin/Furan (CDD/CDF)	16	ng/dscm	0.013 (TEQ)	ng/dscm	4.2.6, 4.2.7, 4.2.12, 4.2.13, 4.2.17
Hydrogen chloride (HCl)	15	ppmv	n/a	n/a	4.2.4.d, 4.2.5, 4.2.6, 4.2.7, 4.2.12, 4.2.13
Cadmium (Cd)	0.017	mg/dscm	n/a	n/a	4.2.6, 4.2.7
Lead (Pb)	0.31	mg/dscm	n/a	n/a	4.2.6, 4.2.7
Mercury (Hg)	0.014	mg/dscm	n/a	n/a	4.2.6, 4.2.7
These testing conditions apply to all or most all pollutants: 4.2.1, 4.2.2, 4.2.3, 4.2.8, 4.2.9, 4.2.10, 4.2.11, 4.2.14, 4.2.15, 4.2.16					

† The Permittee can use either method to show compliance.

* With regard to NO_X and SO_2, the emission limits in the regulations were set under the assumption that compliance required no control devices. Monitoring is therefore not required.

3.2.11 The emissions limits, and stack opacity requirements specified in Condition 3.2.10 apply at all times, except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the HMIWI INC3 during startup, shutdown, or malfunction.
[40 CFR 62.14413 of Federal Plan Subpart HHH]

3.2.12 The Permittee shall not operate outside the parameter limits established for the following parameters, measured as three-hour rolling averages, which have been determined by the method specified in Condition 4.2.7, using data gathered during performance testing which demonstrated compliance:
[40 CFR 62.14453(a)(2) and Table 3 of Federal Plan Subpart HHH]

a. Maximum charge rate of HMIWI INC3.
b. Minimum HMIWI INC3 secondary chamber outlet temperature.
c. Maximum scrubber outlet (exhaust fan flue gas inlet) temperature.
d. Minimum total scrubber recirculation liquid flow rate.
e. Minimum pH of the liquor fluid delivered to the scrubber liquor injection system.
f. Minimum amperage supplied to the Rotary Atomizer Device's drive-motor.

Note: The parameter limits contained in paragraphs a. through f. above do not apply during any performance test(s) performed under a test plan accepted by the Division.

3.2.13 The combination(s) of operating limit exceedances outlined below shall be considered emission limit violations determined by parametric monitoring of the indicated pollutant limits in Condition 3.2.10, in accordance with the definitions of operating limit exceedances determined per Conditions 4.2.6 and 4.2.7 (Note: Table 2, which immediately follows this condition, also contains the limits outlined below in tabular form and contains a brief definition of 3-hour rolling average):

a. Operation of the HMIWI (Source Code: INC3) above the maximum charge weight rate and operation of the scrubber with ID No. RDA1 below the minimum amperage level to the rotary atomizer drive motor (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the PM emission limit.
[40 CFR 62.14455(d)(2)]

b. Operation of the HMIWI (Source Code: INC3) above the maximum charge weight rate and below the minimum secondary chamber outlet temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the CO emission limit.
[40 CFR 62.14455(d)(1)]

c. Operation of the HMIWI (Source Code: INC3) above the maximum charge weight rate and below the minimum secondary chamber outlet temperature, and operation of the scrubber with ID No. RDA1 below the minimum total scrubber recirculation liquid flow rate (each measured on a 3-hour rolling average), simultaneously shall constitute a violation of the dioxin/furan emission limit.
[40 CFR 62.14455(d)(3)]

d. Operation of the HMIWI (Source Code: INC3) above the maximum charge weight rate and operation of the scrubber with ID No. RDA1 below the minimum scrubber liquor pH (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit.
[40 CFR 62.14455(d)(4)]

e. Operation of the HMIWI (Source Code: INC3) above the maximum charge weight rate and operation of the scrubber with ID No. RDA1 above the maximum scrubber outlet (exhaust fan flue gas inlet) temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit.
[40 CFR 62.14455(d)(5)]

f. Opening of the bypass stack isolation damper (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limit.
[40 CFR 62.14455(d)(6)]

Note For purposes of reporting failures to meet an applicable emission limitation per Conditions 6.1.4 and 6.1.7, the above violations will be called "emission limit violations determined by parametric monitoring."

Table 2 Parametric Monitoring Related to Subpart Ec Emission Limit Violations

Measurement Status	Parameter Description	Exceedance per 40 CFR 62 Subpart HHH	Related Permit Condition	Averaging period*	Violated Pollutants Emission Limit
Measured Simultaneously	Charge Weight Rate	Above maximum	3.2.12.a	Three hour rolling	CO
	Secondary Chamber Outlet Temperature	Below minimum	3.2.12.b		
Measured Simultaneously	Charge Weight Rate	Above maximum	3.2.12.a	Three hour rolling	PM
	Rotary atomizer drive motor amperage (in amperes AC).	Below Minimum	3.2.12.f		
Measured Simultaneously	Secondary Chamber Outlet Temperature	Below minimum	3.2.12.b	Three hour rolling	CDD/CDF
	Charge Weight Rate	Above maximum	3.2.12.a		
	Total Scrubber Recirculation Liquid Flow Rate	Below minimum	3.2.12.d		
Measured Simultaneously	Charge Weight Rate	Above maximum	3.2.12.a	Three hour rolling	HCl
	The pH of Liquor Supplied to Scrubber Quench / Condenser Vessel	Below minimum	3.2.12.e		
Measured Simultaneously	Charge Weight Rate	Above maximum	3.2.12.a	Three hour rolling	Mercury
	Scrubber Outlet (Exhaust Fan Flue Gas Inlet) Temperature	Above maximum	3.2.12.c		
Measured Continuously	Bypass Stack Isolation Damper Position	Less than 100% closed	3.2.14	Not Applicable	PM, CDD/CDF, HCl, Pb, Cd, Hg

Table 2 Parametric Monitoring Related to Subpart Ec Emission Limit Violations					
Measurement Status	Parameter Description	Exceedance per 40 CFR 62 Subpart HHH	Related Permit Condition	Averaging period*	Violated Pollutants Emission Limit
* To calculate a three-hour rolling average, the average of the data recorded during each clock-operating-hour is first calculated. That would be done by summing the data points recorded for each individual clock hour (during any normal operation cycle) and then dividing that by the number of data points during that clock hour. For a clock operating hour average to be valid, there must be data points in at least two quadrants of that clock hour during normal operation. The Division has determined that a three-hour average is the average of three consecutive clock operating hour averages. Regarding periods that the incinerator system is shut down, or for which sufficient data is unavailable, a three-hour rolling average must be calculated utilizing clock-hour averages that are not contiguous (such as one from the end of an operating cycle and two from the beginning of the next cycle).					

3.2.14 The Permittee shall not open the by-pass stack isolation damper during incinerator operation. For the purposes of this permit, incinerator operation means *the period during which waste is combusted in the incinerator excluding periods of startup or shutdown.* [40 CFR 62.14490]

Note: For further explanation of the definition of terms (such as: startup, or shutdown) used in this and other conditions, refer to Attachment A of this permit.

3.2.15 The Permittee shall only charge waste to the HMIWI (Source Code: INC3) during normal operations (normal operations as defined in Condition 3.2.14 and Attachment A.) The Permittee shall not begin charging waste (i.e., change from startup mode to the operation mode) to the HMIWI INC3 until the following parameters are in the acceptable ranges of their respective minimum and maximum values (as determined by the most recent successful performance test for any of the pollutants listed in Condition 4.2.6) as found below:
[40 CFR 62.14455(d)]

a. INC3 secondary chamber temperature is above its minimum value per Table 3.

b. RDA1 total scrubber recirculation liquid flow rate is above its minimum value per Table 3.

c. The pH of the liquor fluid delivered to the scrubber quench / condenser vessel is above its minimum value per Table 3.

d. RDA1 scrubber outlet (exhaust fan flue gas inlet) temperature is below its maximum value per Table 3.

e. RDA1 scrubber make-up water flow rate is above its minimum value per Condition 4.2.13.

f. Liquor is flowing to Demister #1.

g. Liquor is flowing to RDA1 atomizer.

h. The bypass stack isolation damper is 100% closed.

3.2.16 The Permittee shall not place the HMIWI (Source Code: INC3) into shutdown mode, following normal operations of the incinerator, until all waste has been combusted. In no case will shutdown begin less than 4 hours after the last charge of waste was loaded into the primary chamber of the incinerator. For the purposes of this permit incinerator shutdown means *the period of time after all waste has been combusted in the primary chamber. … For intermittent HMIWI, shutdown shall commence no less than 4 hours after the last charge to the incinerator.*
[40 CFR 62.14490]

Note: For further explanation of the definitions of terms (such as: startup, shutdown and malfunction, etc.) used in this and other conditions, refer to Attachment A of this permit.

3.2.17 During periods of malfunction of the HMIWI (Source Code: INC3) and/or its control device with ID No. RDA1, the Permittee shall operate the HMIWI within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted (no new waste will be charged into the HMIWI during any malfunction) or until the malfunction ceases, whichever comes first. As defined by 40 CFR 62.14490, malfunction means *any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions.*
[40 CFR 62.14490]

Note: For further explanation of the definitions of terms (such as: startup, shutdown and malfunction, etc.) used in this and other conditions, refer to Attachment A of this permit.

3.2.18 The Permittee shall not operate the HMIWI (Source Code: INC3) unless a qualified HMIWI operator, per Condition 3.3.5, is at the facility or is available within one hour.
[40 CFR 62.14420]

3.2.19 The Permittee shall not operate the HMIWI (Source Code: INC3) below the minimum secondary chamber temperature determined by the Permittee in accordance with Condition 4.2.7 (unless the waste management plan, per Condition 3.3.8, includes higher temperatures to ensure protection of the public from toxic and pathogenic emissions).[2]
[40 CFR 62.14453(a)(2), 40 CFR 62.14413, and 391-3-1-.02(2)(a)10]

3.2.20 At a minimum, the Permittee shall initiate the cleaning operation for the scrubber with ID No. RDA1, Demisters #2 and #3, in accordance with the manufacturer's recommended procedures, to assure their efficient functioning. The cleaning operation shall be initiated when the pressure drop across both demisters exceeds 0.5 inches of water column.
[40 CFR 62.14413, 40 CFR 62.14442(b), and 391-3-1-.02(2)(a)10]

2 When combusting cytotoxic contaminated waste (or similar type wastes) the minimum secondary chamber temperature must be maintained at 1800 ºF (982 ºC) or higher, per Georgia Rules for Solid Waste Control Chapter 391-3-4-.15(6)(a)1.(i).

3.2.21 The Permittee shall operate the scrubber with ID No. RDA1 so that the scrubber make-up water flow rate is high enough so that the scrubber blow-down flow rate is sufficient to ensure proper operation of the pH monitor required by Condition 5.2.8.
[40 CFR 62.14413, 40 CFR 62.14442(b), and 391-3-1-.02(2)(a)10]

3.2.22 The Permittee shall assure that there is water flow to Demister #1 and to the atomizer disc at all times during incinerator operation. Each of these lines shall be equipped with flow switches that will indicate if flow is occurring or not.
[40 CFR 62.14413, 40 CFR 62.14442(b), and 391-3-1-.02(2)(a)10]

3.2.23 The Permittee shall ensure that all monitoring devices listed in Conditions 5.2.8 and 5.2.10 operate, collect and record valid data at all times that the HMIWI (Source Code: INC3) is in operation. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and 90 percent of the operating days per calendar quarter that the affected facility is combusting hospital waste and/or medical/infectious waste.
[40 CFR 62.14454(d)]

Note: A valid operating hour is one in which instrument data is collected in two quadrants of an operating hour after the incinerator begins operation. Only operating hours should be used to calculate the monitoring system data availability and only valid operating hours should be used to calculate any three-hour rolling averages, an exception to this is the monitor for the by-pass stack isolation damper position.

3.2.24 The Permittee shall only incinerate the following waste types in the incinerator (Source Code: INC3):
[391-3-1-.03(2)(c) and 40 CFR 62.14490]

a. Hazardous Medical and Infectious Waste as defined in Federal Plan 40 CFR 62 Subpart HHH.

b. Pathological waste as defined in Federal Plan 40 CFR 62 Subpart HHH.

c. Contraband which is being destroyed at the request of appropriately authorized local, state, or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or an otherwise prohibited waste at the facility. For the purposes of this section, contraband includes, but not limited to drugs and narcotics.

3.3 Equipment Federal Rule Standards

Boilers

3.3.1 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart A – "General Provisions," and Subpart Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for the operation of the boilers (Source Codes: BL01, BL04, and BL10).
[40 CFR 60 Subparts A and Dc]

3.3.2 The Permittee shall not cause to be discharged into the atmosphere from the boilers (Source Codes: BL01, BL04, and BL10), any gases that exhibit visible emissions, the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of no more than 27 percent opacity.
[40 CFR 60.43c(c) and 391-3-1-.02(2)(d)3.]

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

3.3.3 The Permittee shall comply with all applicable provisions of 40 CFR 62, Subpart HHH – "Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed On Or Before December 1, 2008" for the operation of the HMIWI (Source Code: INC3).
[40 CFR 62 Subpart HHH and 40 CFR 62.13(c)]

3.3.4 The Permittee shall develop and implement a documented training program to ensure that qualified HMIWI operators are available to operate the HMIWI (Source Code: INC3), in accordance with Condition 3.2.18. Documentation of the training program shall be kept on site and available for inspection by, or submittal to, EPD personnel upon request. The training program shall contain, at a minimum, the following provisions:
[40 CFR 62.14422]

a. Twenty four (24) hours of training on the following subjects:

i. Environmental concerns, including pathogen destruction and types of emissions;

ii. Basic combustion principles, including products of combustion;

iii. Specific operating requirements and techniques for the Crawford Model CB74SW-L incinerator, including proper startup, waste charging, and shutdown procedures;

iv. Combustion controls and monitoring;

v. Specific operating requirements and techniques for the operation of the Emcotek Model: 130H-500 Rotating Disc Atomizer Wet Scrubbing System, and factors affecting its performance;

vi. The methods required to monitor pollutants (continuous emission monitoring systems, monitoring of the HMIWI INC3 and monitoring air pollution control device operating parameters) and equipment calibration procedures. Included

in this section will be detailed training on the operation of the data acquisition system and monitoring devices and how this system and instrumentation meets the requirements contained in Conditions 5.2.7 through 5.2.10;

vii. Inspection and maintenance procedures for the HMIWI INC3, air pollution control devices, and continuous emission monitoring system;

viii. Actions to correct malfunctions, or conditions that may lead to malfunction;

ix. Bottom and fly ash characteristics and handling procedures;

x. Applicable Federal, State, and local regulations;

xi. Work safety procedures;

xii. Pre-startup inspections; and

xiii. Recordkeeping requirements, including the requirements contained in Conditions 6.2.20 through 6.2.24.

b. An examination designed and administered by the instructor.

c. Reference material distributed to the individuals that are taking the training course to become qualified.

3.3.5 A person shall be considered a qualified HMIWI operator after both successfully completing the required training course outlined in Condition 3.3.4 and having the required amount of on the job experience, which is either 6 months experience as an HMIWI operator, 6 months experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under the observation of two qualified HMIWI operators.

The Permittee shall also ensure that, until operators meet the above requirements, the HMIWI is operated by fully trained representatives of the manufacturers of the HMIWI (Source Code: INC3) or the scrubber with ID No. RDA1. The names and credentials of any manufacturer representatives operating the HMIWI (Source Code: INC3) shall be kept on site and available for inspection by or submittal to EPD personnel upon request.
[40 CFR 62.14423(a) and (b)]

3.3.6 The Permittee shall maintain the qualification of its HMIWI operators by ensuring that each qualified HMIWI operator completes and passes an annual review or refresher course of at least 4 hours covering, at a minimum, the following course topics and requirements:
[40 CFR 62.14423(c)]

a. Update of regulations;

b. Incinerator operation, including startup and shutdown procedures;

c. Inspection and maintenance procedures;

d. Procedures which must be followed to respond to malfunctions or conditions that may lead to malfunctions; and

e. Discussion of operating problems encountered by attendees of the training.

3.3.7 For a qualified HMIWI operator at the facility whose qualifications lapse, the qualifications may be renewed by one of the following methods:
[40 CFR 62.14423(d)]

a. For a lapse of less than 3 years, the HMIWI operator shall complete and pass a standard annual refresher course as required by Condition 3.3.6.

b. For a lapse of 3 or more years, the HMIWI operator shall complete and pass a training course with the minimum criteria required by Condition 3.3.4.

3.3.8 The Permittee shall prepare and maintain a waste management plan (WMP) of any waste fired in the HMIWI (Source Code: INC3). The WMP shall identify both the feasibility and the approach to separate certain components of solid waste from the waste stream in order to reduce the amount of toxic emissions from incinerated waste. A WMP may include, but is not limited to, elements such as paper, cardboard, plastics, glass, battery, or metal recycling; or purchasing recycled or recyclable products. A WMP may include different goals or approaches for different area of departments of the facility and need not include separate waste management goals for every waste stream. It should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any other environmental or energy impacts they might have. The Permittee shall show how the American Hospital Association publication "*An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities*" or other similar publications were considered in the development of the WMP.

The WMP shall also specifically provide a detailed discussion concerning the appropriate care and HMIWI firing conditions needed to assure acceptable destruction of pathogens that are contained in the waste stream to be processed by the HMIWI. The minimum operating temperature of the secondary chamber in support of Condition 3.2.19 shall be clearly documented. The Permittee shall complete and submit a final WMP outlined above as part of the test report required by Condition 4.2.3.
[40 CFR 62.14431 and 391-3-1-.02(2)(a)10]

Emergency Generators

3.3.9 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart A – "General Provisions," and Subpart IIII – "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," for the operation of the diesel engine driven generators (Source Codes: CG15 through CG17).
[40 CFR Subparts A and IIII]

3.3.10 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the diesel engine driven generators (Source Codes: CG15 through CG17), any gases which:
[40 CFR 60.4205(1) and Table 1 of NSPS Subpart IIII]

a. Contain hydrocarbons (HC) in excess of 1.3 grams per kilowatt-hour.

b. Contain nitrogen oxides (NOx) in excess of 9.2 grams per kilowatt-hour.

c. Contain carbon monoxide (CO) in excess of 11.4 grams per kilowatt-hour.

d. Contain particulate matter (PM) in excess of 0.54 gram per kilowatt-hour.

3.3.11 The Permittee shall fire, in the diesel engine driven generators (Source Codes: CG15 through CG17), only diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel, which is subject to the following per-gallon standards:
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 60.4207(b), 40 CFR 80.510(b), and 391-3-1-.02(2)(g)2.(subsumed)]

a. Sulfur content: 15 parts per million (ppm) maximum.

b. Cetane index or aromatic content, as follows:

i. A minimum cetane index of 40; or

ii. A maximum aromatic content of 35 volume percent.

3.3.12 The Permittee shall operate and maintain the diesel engine driven generators (Source Codes: CG15 through CG17) according to the engine manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engines. In addition, the Permittee may only change those settings that are permitted by the engine manufacturer.
[40 CFR 60.4206 and 40 CFR 60.4211(a)]

3.3.13 The Permittee shall not operate the diesel engine driven generators (Source Codes: CG15 through CG17) for purposes other than emergency uses, maintenance checks, and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engines. Maintenance checks and readiness testing of each engine is limited to 100 hours per year.
[40 CFR 60.4211(e)]

3.3.14 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, Subpart A – "General Provisions," and Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" for the operation of the diesel engine driven generators (Source Codes: CG15 through CG17) by complying with all applicable provisions in Conditions 3.3.9 through 3.3.13.
[40 CFR 63 Subparts A and ZZZZ]

3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG17) and the boilers (Source Codes: BL02 and BL03), any gases which exhibit visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1.]

3.4.2 The Permittee shall not discharge or cause the discharge into the atmosphere from the incinerators (Source Codes: INC1 and INC4), any gases which:
[391-3-1-.02(2)(c)]

a. Contain particulate matter (PM) in excess of 1.0 pound PM per hour while operating.

b. Exhibit visible emissions, the opacity of which is equal to or greater than twenty (20) percent, except for one six-minute period per hour of not more than twenty-seven (27) percent opacity.

c. Contain any particles, which are individually large enough to be visible to the unaided eye.

3.4.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the boilers (Source Codes: BL02 and BL03), any gases which contain particulate emissions equal to or exceeding the rate derived from $P=0.7*(10/R)^{0.202}$, where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU.
[391-3-1-.02(2)(d)1.(ii)]

3.4.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the boilers (Source Codes: BL01, BL04, and BL10), any gases which contain particulate emissions equal to or exceeding the rate derived from $P=0.5*(10/R)^{0.5}$, where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU.
[391-3-1-.02(2)(d)2.(ii)]

3.4.5 The Permittee shall not discharge, or cause the discharge into the atmosphere, from the boilers (Source Codes: BL01 and BL10), any gases, which contain nitrogen oxides (NOx) in excess of 30 parts per million (ppm) corrected to 3 percent oxygen on a dry basis. This requirement shall apply from May 1 through September 30 of each year.
[391-3-1-.02(2)(lll)1.]

3.4.6 The Permittee shall limit the total hourly operation of each diesel engine driven generator (Source Codes: CG01 though CG04 and CG07 through CG17) to less than 200 hours during any 12-months period. Each engine driven generator must meet the definition of an "emergency standby stationary engine" as defined in 391-3-1-.02(2)(mmm)4.(i), and shall only operate the units during emergency loss of utility electric power service, or engine maintenance and operability testing, to be exempt from the Rule (mmm) NO_X limit. Note

that the diesel engine driven generators (Source Codes: CG08 and CG09) are also subject to more stringent annual operating hour limits, which are found in Condition 3.2.1.a.
[391-3-1-.02(2)(mmm)7.]

3.4.7 The Permittee shall take all reasonable precautions to prevent dust from becoming airborne including, but not limited to, the application of water or other suitable chemicals to control fugitive dust.
[391-3-1-.02(2)(n)]

3.4.8 The Permittee shall not discharge, or cause the discharge into the atmosphere from the handling of ash from the incinerators (Source Codes: INC1, INC3, and INC4), any fugitive dust that exhibits opacity equal to or greater than 20 percent.
[391-3-1-.02(2)(n)]

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

Hospital/Medical/Infectious Waste Incinerator INC3

3.5.1 Routine maintenance shall be performed on all air pollution control equipment. Maintenance records shall be recorded in a permanent form. For the scrubber with ID No. RDA1, these records will be included in the operations/monitoring documentation required by Condition 6.2.23. The records shall be retained for at least five years following the date of such maintenance.
[391-3-1-.02(2)(a)10]

3.5.2 A spare parts/consumables inventory for control and monitoring equipment shall be maintained by the Permittee. A list of such parts/consumables related to the HMIWI (Source Code: INC3) and its associated scrubber with ID No. RDA1 shall be included in the operations/monitoring documentation required by Condition 6.2.23.
[391-3-1-.02(2)(a)10]

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division ("Division"). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]

4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

a. Method 1 shall be used for the determination of sample point locations and velocity traverses;

b. Method 2 shall be used for the determination of stack gas flow rate;

c. Method 3 or 3A shall be used for the determination of stack gas molecular weight;

d. Method 3B shall be used for the determination of the emission rate correction factor or excess air (Method 3A may be used as an alternative to Method 3B);

e. Method 4 shall be used for the determination of stack gas moisture;

f. Method 5 appendix A-3, or Method 26A, or Method 29 appendix A-8 shall be used for the determination of the particulate matter concentration;

g. Method 7 or 7E appendix A-4 shall be used for the determination of the nitrogen oxides concentration;

h. Method 9 and the procedures contained in Section 1.3 of the above referenced document shall be used for the determination of opacity;

i. Method 10 or 10B shall be used for the determination of the carbon monoxide concentration;

j. Method 19 shall be used to convert particulate matter and nitrogen oxides concentration, as determined by other methods specified in this section, to emission rate (i.e., lb/MM Btu);

k. Method 19, Section 12.5.2.2.3, shall be used for the determination of fuel oil sulfur content;

l. ASTM D 4057 shall be used for the collection of fuel oil samples;

m. Method 23 shall be used for the determination of total Polychlorinated Dibenzo-p-Dioxins (CDD) and Polychlorinated Dibenzofurans (CDF). The minimum sample time shall be four hours per test run;
[40 CFR 62.14452(k)]

n. Method 26 or Method 26A (isokinetic method) shall be used for the determination of hydrogen chloride concentrations; and
[40 CFR 62.14452(l)]

o. Method 29 shall be used for the determination of the concentrations of mercury, cadmium, and lead.
[40 CFR 62.14452(m)]

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.1.4 The Permittee shall submit performance test reports to the US EPA's WebFIRE database in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements.
[391-3-1-.02)(8)(a) and 391-3-1-.02(9)(a)]

4.2 Specific Testing Requirements

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

4.2.1 All required monitoring systems and devices shall be installed, calibrated and operating, and the Data Acquisition System/Data Management System (DAS/DMS) installed per Condition 5.2.7 shall be fully implemented when performance tests are conducted. Information documenting the requirements of this permit condition shall be included in the operations/monitoring documentation required by Condition 6.2.23 and submitted with the notification of performance test plan per Condition 4.1.2. The documentation shall contain, as a minimum, the following:
[40 CFR 70.6(a)(3), 40 CFR 62.14454(a), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1]

a. Sample copies of the daily record of operating parameters.

b. An example of the output data from all monitoring systems and devices.

c. Method(s) used by the DAS/DMS to calculate averages.

d. Method(s) used by the DAS/DMS to measure, calculate and document the minimum or maximum value of a parameter within a given time period.

e. Method(s) used by the DAS/DMS to simultaneously capture all the parameter values being monitored so that the times each parameter is recorded are synchronized one to another.

f. Method(s) used by the DAS/DMS to calculate derived parameter’s values.

g. The minimum throughput rate that each measured parameter is recorded.

h. All parametric data that was recorded, beginning at least one day prior to, and continuing until at least one day following, the most recent performance test of the HMIWI (Source Code: INC3).

i. Calibration procedures, including channel span, accuracy and reliability specifications, and calibration frequencies per the manufacturer as contained in the documentation required by Condition 6.2.23.

4.2.2 If the data contained in the operations/monitoring documentation, as required by Condition 6.2.23, has changed since the previous performance test, then the Permittee shall submit an updated version of this documentation with the performance test report for the tests required by Conditions 4.2.4 and 4.2.5, in accordance with the performance testing plan submitted by the Permittee.
[391-3-1-.02(3) and 391-3-1-.02(6)(b)1.(i)]

4.2.3 The Permittee shall ensure that the waste stream that is combusted during the performance tests required by Conditions 4.2.4, 4.2.5, and 4.2.9, will be representative of the waste stream characterized by the most recent WMP analysis.
[40 CFR 62.14452(a), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

4.2.4 The Permittee shall perform annual tests for emissions of the following pollutants from the stack for the HMIWI (Source Code: INC3) to verify compliance with the applicable emission limits specified in Table 1 of this Permit. Subsequent testing shall be carried out no more than 12 months following the previous performance test, except as allowed by Conditions 4.2.5 and 4.2.9. The Permittee shall carry out a minimum of 3 test runs per test and each test run shall be performed for a minimum of 1 hour, unless otherwise indicated, with all emissions corrected to 7% oxygen, dry basis.
[40 CFR 62.14451(b), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

a. Visible emissions, in percent opacity.

b. Particulate matter (PM), in units of gr/dscf.

c. Carbon monoxide (CO), in units of ppm_{dv}.

d. Hydrogen chloride (HCl) in units of ppm_{dv}.

4.2.5 The Permittee, after successfully completing performance tests over a 3-year period that demonstrate compliance with the emission limit for PM, CO, or HCl, may forego a performance test for a pollutant for the subsequent 2 years (there must be no more than 36 months between performance tests for the same pollutant). If a performance test conducted every third year indicates compliance with the applicable emission limit for PM, CO or HCl, the Permittee may again forego that performance test for that pollutant the 2 years following. If any performance test indicates noncompliance with its emission limit, the performance test frequency for that pollutant shall revert to annual as outlined in Condition 4.2.4. [Note that the performance test skipping provisions of this condition do not apply to Opacity testing which must be done every 12 months, regardless of the result.]
[40 CFR 62.14451(b)(2), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

4.2.6 The Permittee shall ensure that the following parameter values are documented and recorded from data gathered during the performance testing indicated (refer to Condition 4.1.3 for the applicable EPA Reference Method for the Pollutant mentioned). Documentation of the signal conditioning and calculations required to determine the values shall be included in the record:
[40 CFR 62.14453(a)(2), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

a. The lowest three hour average HMIWI hourly charge weight rate measured during the test runs for CO, CDD/CDF, HCl, PM and Toxic Metals (Hg, Cd, and Pb).

b. The highest 3 hour average HMIWI secondary chamber outlet temperature, in degrees Fahrenheit, measured during the performance test runs for PM, CO, and CDD/CDF.

c. The lowest 3 hour average scrubber outlet (exhaust fan flue gas inlet) temperature, in degrees Fahrenheit, measured during the performance test runs for mercury.

d. The highest 3 hour average scrubber RDA1 total scrubber recirculation liquid flow rate, in gallons per minute, into the scrubber system during the performance test runs for CO, CDD/CDF, HCl, PM and Toxic Metals (Hg, Cd, and Pb).

e. The highest 3 hour average liquor pH as supplied to the Quench/Condensing Vessel, during the performance test runs for HCl.

f. The highest 3 hour average amperage, in amps AC, of the atomizer motor during the performance test runs for CO, CDD/CDF, HCl, PM and Toxic Metals (Hg, Cd, and Pb).

g. The highest 3 hour average Scrubber RDA1 make-up water flow rate during the performance test runs for HCl, PM and Toxic Metals (Hg, Cd, and Pb).

h. The bypass stack isolation damper position for each test run of each test must be documented.

Notes: In the context of the DAS/DMS referred to in this permit, signal conditioning refers to any intermediary devices that processes, manipulate or standardizes the physical phenomena measured by the sensing element as it is being input to the DAS. Examples are analog, analog-to-digital converters, I/O devices, isolation devices, signal amplifiers, and filters.

The bypass stack (hot stack) isolation damper must be 100% closed during an entire test run for that test run to be valid, for tests performed per Condition 4.2.4.

4.2.7 The Permittee shall calculate the following values to determine the parametric operating limits for normal operation of the HMIWI (Source Code: INC3) using the following equation, with the values provided in Table 3. The Permittee must use the parametric data collected during the most recent successful performance stack testing:
[40 CFR 62.14490, 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

$$A \times B = C$$

Where: A = Measured Parameter
B = Multiplier
C = Calculated Operational Limit

Table 3
Parametric Monitoring Operational Limit Calculation Table

A	X B	= C		
Measured Parameter	Multiplier	Calculated Operational Limit	Test That the Average Value is Taken From*	Monitoring Parameter Condition
Lowest 3 hour average hourly charge weight rate (lb/hr)	1.10 (110%)	Maximum hourly charge weight rate (lb/hr)	CO, CDD/CDF, HCl, PM, Pb, Cd, or Hg	4.2.6.a
Highest 3-hour average secondary chamber temperature (ºF)	0.90 (90%)	Minimum secondary chamber outlet temperature (ºF)	PM, CO, or CDD/CDF	4.2.6.b
Lowest 3-hour average scrubber outlet (exhaust fan flue gas inlet) temperature (ºF)	1.10 (110%)	Maximum scrubber outlet (exhaust fan flue gas inlet) temperature (ºF)	Mercury (Hg)	4.2.6.c
Highest 3-hour average Total Scrubber Recirculation Liquid Flow Rate (gallons/min)	0.9 (90%)	Minimum total scrubber liquor flow rate (gallons/min)	CO, CDD/CDF, HCl, PM, Pb, Cd, or Hg	4.2.6.d
Highest 3 hour average pH of the scrubber system quench / condensation vessel (pH)	0.9 (90%)	Minimum liquor pH	HCl	4.2.6.e

Table 3
Parametric Monitoring Operational Limit Calculation Table

A	X B	= C		
Measured Parameter	Multiplier	Calculated Operational Limit	Test That the Average Value is Taken From*	Monitoring Parameter Condition
Highest 3-hour average amperage of the atomizer drive motor, in amperes AC	0.90 (90%)	Minimum atomizer drive motor amperage	CO, CDD/CDF, HCl, PM, Pb, Cd, or Hg	4.2.6.f

*The average value (A) to be used is the value that was determined from data recorded as specified in Table 5, collected during the most recent successful performance stack testing for the pollutants listed in this table next to the applicable parameter. [40CFR60.51c]

4.2.8 The HMIWI (Source Code: INC3) is not subject to the emission limitations contained in Conditions 3.2.10 and 3.2.12 during any performance tests required by Condition 4.2.4, as long as the Permittee has received prior approval from the Division to perform the tests. If the emission rate determined during an approved performance test(s) exceeds the emission limit contained in Conditions 3.2.10 and 3.2.12, the Permittee must notify the Division, in writing within 7 days, and include the results of the performance test. If the test shows an exceedance, the Permittee shall schedule a repeat performance test and notify the Division of the test date as early as practicable. Once the repeat test has been performed, the Permittee shall submit the test report to the Division, within 14 days of receipt.
[40 CFR 62.14453(a)(2) and 40 CFR 62.14455(d)]

4.2.9 The Permittee may conduct a repeat performance test at any time to establish new values for the operating parameters per Conditions 4.2.6 and 4.2.7 as long as the Permittee complies with the procedures contained in Conditions 4.1.2 and 4.1.3.
[40 CFR 62.14455(i), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

4.2.10 If the bypass stack isolation damper is not 100% closed at any time during a performance test run for testing required by Condition 4.2.4, that test run is invalidated and must be redone.
[40 CFR 62.14451(b)(1) and (2)]

4.2.11 During any performance testing the Permittee shall provide real-time data from the DAS/DMS to the Division in a form suitable and in sufficient quantity and quality so that the Division may make compliance determinations and easily perform analyses of operating limits and parameter specifications.
[40 CFR 62.14454(a)]

4.2.12 During the CDD/CDF, PM and HCl emissions tests required by Condition 4.2.4, the Permittee shall measure and record the make-up water flow rate of the scrubber with ID No. RDA1 and the differential pressure across Demisters #2 and #3, recording data at least once every 15 minutes.
[40 CFR 62.14454(c), 40 CFR 62.14454(b), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

4.2.13 The Permittee shall calculate the make-up water flow rate of the scrubber with ID No. RDA1 by multiplying the highest average parameter data measured during the most recent successful performance compliance test, as per Condition 4.2.12, by 0.90, as shown in the equations below:
[40 CFR 60.51c, 40 CFR 62.14454(b), 40 CFR 60.56c(f)(4), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1.(i)]

$$FR_{avg-SMW} \times 0.90 = FR_{\min-SMW}$$

Where: $FR_{avg\text{-}SMW}$ = Highest average make-up water flow rate of the scrubber with ID No. RDA1

$FR_{min\text{-}SMW}$ = Calculated minimum make-up water flow rate (limit) for the scrubber with ID No. RDA1.

4.2.14 If a parametric monitoring violation occurs, as specified in Table 2 of Condition 3.2.13, the Permittee may demonstrate that the facility was not in violation of the applicable emission limit by performing the applicable performance test(s), as per Condition 4.1.3**,** for the applicable emission limit, established per Conditions 4.2.6 and 4.2.7, within 30 days from the date of the indication of a violation. If the Permittee chooses to perform such a performance test, the Permittee must also do the following:
[40 CFR 62.14455(g), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1]

a. Ensure that the repeat performance test is conducted using the identical operating parameters that indicated a violation.

b. Notify the Division, immediately following the date of the violation, of the nature and amount of the violation, and the dates of the scheduled performance retest.

c. Prior to the retest, provide the Division documentation of all monitoring parameters recorded during the violation, and a detailed explanation of events surrounding the violation.

4.2.15 The results of any required performance tests shall be submitted to the Division within two weeks of receipt by the Permittee, but in no event later than 60 days from the completion of testing. The Permittee must include these test results in a Performance Test Report as required by 40 CFR 62.14463 for approval by the Division. This condition does not preclude the Division from requesting, as circumstances dictate, the submission of performance test results as soon as the results are known or determined.
[40 CFR 62.14464]

4.2.16 In any report established for a test of the HMIWI (Source Code: INC3) done in accordance with Conditions 4.1.1, 4.2.4 or 4.2.14**,** containing emission test results, the Permittee shall include the following:
[40 CFR 62.14464(a), 40 CFR 70.6(a)(3)(i), 391-3-1-.02(3), and 391-3-1-.02(6)(b)1]

a. Calendar date of each record.

b. The results of the performance test.

c. The waste charge dates, times, waste composition and weights as well as hourly charge rates.

d. The primary chamber outlet temperatures, recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.10.

e. The secondary chamber outlet temperatures, recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.9.

f. The scrubber outlet (exhaust fan flue gas inlet) temperatures recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.9.

g. Bypass stack isolation damper position recorded during testing. Included in the record shall be dates, times, and durations, if any, when the isolation damper was not 100% closed.

h. Records of the total scrubber recirculation liquid flow rate, recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.9.

i. Records of the atomizer drive motor amperage, recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.9.

j. Records of the RDA1 atomizer flow rate recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.10. The rotameter for that flow shall also be read and recorded during each test run and the records kept, to compare with the flow rate recorded by the DAS.

k. RDA1 scrubber differential pressure (in inches of water column) across Demisters #2 and #3, using the minimum hourly recording throughput rate specified in Condition 5.2.10.

l. Records of the scrubber pH monitor readings, recorded during testing, using the minimum hourly recording throughput rate specified in Condition 5.2.9.

m. Records of the RDA1 make-up water flow rate, recorded during the testing, using the minimum hourly recording throughput rate specified in Condition 5.2.10.

n. Records of the instrumentation calibrations specified in the operations / monitoring documentation required by Conditions 4.2.2, 6.2.21, and 6.2.23.

o. Records of the monitor calibration tests performed which establish the relationship between the atomizer amperage and the liquor flow rate prior to the stack testing.

p. Notification of any changes to the DAS/DMS, compared to previous performance tests.

q. Records showing the names of the qualified HMIWI operators that have fulfilled the requirements for the annual review of the operations / monitoring documentation and WMP documents, per Conditions 6.2.24 and 6.2.28.

r. Records showing the names of the qualified HMIWI operators that have fulfilled the requirements of performing initial operator training and annual operator training, per Conditions 3.3.5 and 3.3.7.

4.2.17 If the Permittee chooses to comply with the dioxin/furan limit specified in Table 1 of Condition 3.2.10 by using Reference Method 23, the toxic equivalent (TEQ) procedure method, the Permittee shall use the following equations to determine the sum of the individual dioxin and furan isomers multiplied by their toxic equivalence to the most toxic of the isomers, tetra-chlorinated dibenzo-p-dioxin (2,3,7,8-TCDD), $C_{TCDD\text{-}TEQ}$. Table 4 contains the definition of the various subscript designations representing the Dioxin / Furan isomers contained in the equations.
[40 CFR 62.14452(k)(1) through (3) and Table 2 to Subpart HHH]

$$\text{Total } C_{TCDD-TEQ} = \sum_{CDD-TEQ} + \sum_{CDF-TEQ}$$

$$\sum_{CDD-TEQ} = C_{TCDD} + C_{PeCDD} + 0.1\times C_{HxCDD} + 0.01\times C_{HpCDD} + 0.0003\times C_{OCDD}$$

$$\sum_{CDF-TEQ} = 0.3\times C_{PeCDF_4} + 0.1\times\left(C_{TCDF} + C_{HxCDF}\right) + 0.03\times C_{PeCDF_1} + 0.01\times C_{HpCDF} + 0.0003\times C_{OCDF}$$

Table 4 Isomer Subscript Designation for TEQ Calculations		
C_{TCDD}	2,3,7,8-TCDD	Tetra-chlorinated dibenzo-p-dioxin
C_{PeCDD}	1,2,3,7,8-PCDD	Penta-chlorinated dibenzo-p-dioxin
C_{HxCDD}	1,2,3,4,7,8-HxCDD	Hexa-chlorinated dibenzo-p-dioxin
	1,2,3,7,8,9-HxCDD	
	1,2,3,6,7,8-HxCDD	
C_{HpCDD}	1,2,3,4, 6,7,8-HpCDD	Hepta-chlorinated dibenzo-p-dioxin
C_{OCDD}	OctaCDD	Octa-chlorinated dibenzo-p-dioxin
C_{TCDF}	2,3,7,8-TCDF	Tetra-chlorinated dibenzo furans
C_{PeCDF1}	1,2,3,7,8-PCDF	Penta-chlorinated dibenzo furans
C_{PeCDF4}	2,3,4,7,8-PCDF	Penta-chlorinated dibenzo furans
C_{HxCDF}	1,2,3,4,7,8-HxCDF	Hexa-chlorinated dibenzo furans
	1,2,3,6,7,8-HxCDF	
	1,2,3,7,8,9-HxCDF	
	2,3,4,6,7,8-HxCDF	
C_{HpCDF}	1,2,3,4,6x,7,8-HpCDF	Hepta-chlorinated dibenzo furans
	1,2,3,4,7,8,9- HpCDF	
C_{OCDF}	OctaDCF	Octa-chlorinated dibenzo furans
Where: Each C_{xxxxx} is the Concentration (nanograms / dscm) of one of the listed dioxin or furan isomers		

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.1 General Monitoring Requirements

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

5.2.1 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. A natural gas consumption meter or other method acceptable to the Division to measure and record the total quantity of natural gas, in cubic feet, burned in the boilers (Source Codes: BL01, BL04, and BL10). Data shall be recorded monthly.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR and 40 CFR 60.48c(g)2.

b. A fuel oil consumption meter or other method acceptable to the Division to measure the total quantity of fuel oil fired (in gallons) in the boilers (Source Codes: BL01, BL04, and BL10). Data shall be recorded monthly.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR and 40 CFR 60.48c(g)2.]

c. A non-resettable hour meter to measure and record the number of hours operated for each diesel engine driven generator (Source Codes: CG01 through CG04 and CG08 through CG14). Data shall be recorded monthly.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR and 391-3-1-.02(2)(mmm)7.]

d. A non-resettable hour meter to measure and record the number of hours operated during any type of operation, for each diesel engine driven generator (Source Codes: CG15 through CG17). The Permittee shall record the reason why the engines/generators are in operation each time. The monthly total net operating hours, for each type of operating reasons shall be recorded in accordance with Condition 6.2.3.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, 40 CFR 60.4209(a), and 391-3-1-.02(2)(mmm)7.]

e. A non-resettable hour meter to measure and record the number of hours operated for the diesel engine driven generator (Source Code: CG07). Data shall be recorded monthly.
[391-3-1-.02(2)(mmm)7.]

5.2.2 The Permittee shall install, calibrate, maintain, and operate a Predictive Emissions Monitoring System (PEMS), which continuously monitors boiler operating parameters and predicts NO_X emission rates from the boiler (Source Code: BL04) while firing natural gas and while firing No. 2 fuel oil. Boiler operating parameters which may be used to predict NO_X emission rates include, but are not limited to, fuel flow rate, flue gas oxygen level, and ratio of primary air to secondary and/or tertiary air. The 1-hour average NO_X emission rates predicted by the PEMS shall be in terms of pounds NO_X per million BTU. The PEMS shall meet the Relative Accuracy (RA) specification of Performance Specification 2 contained in Appendix B of the Division's *Procedures for Testing and Monitoring Sources of Air Pollutants*. The Permittee shall, at approximately 12-month intervals, conduct a Relative Accuracy Test Audit (RATA) on the PEMS using the procedures of Performance Specification 2.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

5.2.3 The Permittee shall install, calibrate, maintain, and operate a Predictive Emissions Monitoring System (PEMS), which continuously monitors boiler operating parameters and predicts NO_X emission rates from the boilers (Source Codes: BL01 and BL10) while firing natural gas and while firing No. 2 fuel oil. Boiler operating parameters which may be used to predict NO_X emission rates include, but are not limited to, fuel flow rate, flue gas oxygen level, and ratio of primary air to secondary and/or tertiary air. The 1-hour average NO_X emission rates predicted by the PEMS shall be in terms of pounds NO_X per million BTU and NO_X concentration (ppm) at 3 percent oxygen. The PEMS shall meet the Relative Accuracy (RA) specification of Performance Specification 2 contained in Appendix B of the Division's *Procedures for Testing and Monitoring Sources of Air Pollutants*. The Permittee shall, at approximately 12-month intervals, conduct a Relative Accuracy Test Audit (RATA) on the PEMS using the procedures of Performance Specification 2.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, 40 CFR 70.6(a)(3)(i), 391-3-1-.02(2)(lll), and 391-3-1-.02(6)(b)1.]

5.2.4 The Permittee shall perform an annual tune-up on the boilers (Source Codes: BL02, BL03, and BL04) using the following procedures:
[391-3-1-.02(2)(yy)1.]

a. The tune-up shall be performed no earlier than February 1 and no later than May 1 of each calendar year on the boilers (Source Codes: BL02, BL03, and BL04).

b. The annual tune-up shall be performed using the manufacturer's recommended settings for reduced NO_X emissions, or using a NO_X analyzer so that NO_X emissions are minimized in a manner consistent with good combustion practices and safe fuel-burning equipment operation.

c. If the Permittee elects to use a NO_X analyzer, measurements of Nitrogen Oxides and Oxygen shall be conducted using the procedures of Gas Research Institute Method GRI-96/0008, EPA/EMC Test Method (ASTM D 6522-00) *Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers.* The duration of each test run shall be for a minimum of 30 minutes. In lieu of using the procedures of ASTM 6522-00, measurements of Nitrogen Oxides and Oxygen can be made using the procedures of Methods 7E and 3A, respectively, listed in Condition 4.1.3. A minimum of three test runs is required to show the NO_X emissions are minimized. The duration of each test run shall be for a minimum of 30 minutes.

d. Boiler operating parameters shall be adjusted until the Nitrogen Oxides emissions are minimized. Boiler operating parameters include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary air/tertiary air), and the level of excess air (i.e., flue gas oxygen level).

e. The Permittee shall maintain records of all tune-ups required to be performed in accordance with subparagraphs a and b. These records shall indicate the date and time the tune-up was performed, state what burner and parameter settings were implemented to minimize NO_X emissions, and explain how those settings were determined. All documents and calculations used to determine reduced NO_X fuel-burning equipment settings shall be kept as part of the tune-up, maintenance and adjustments records. All records required by this subparagraph shall be retained and made available for inspection or submittal either in written or electronic form for at least five years from the date of record.

Incinerators INC1 and INC4

5.2.5 The Permittee shall install, calibrate, maintain, and operate devices to continuously monitor and record the indicated parameters on each of the incinerators (Source Codes: INC1 and INC4). Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. A monitoring device, with a system accuracy within a value of 2% of the steady state design temperature (in degrees Fahrenheit), for continuously measuring the primary chamber outlet gas temperature. Data shall be recorded every two hours during which the incinerator operates.
[391-3-1-.02(2)(c)4.(ii)]

b. A monitoring device, with a system accuracy within a value of 2% of the steady state design temperature (in degrees Fahrenheit), for continuously measuring the secondary chamber outlet gas temperature. Data shall be recorded every two hours during which the incinerator operates.
[391-3-1-.02(2)(c)4.(iii)]

5.2.6 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the incinerators (Source Codes: INC1 and INC4). Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. Scales capable of accurately measuring the weight of the waste loaded into each incinerator (Source Codes: INC1 and INC4). The weight and time shall be recorded for each charge of waste loaded into each incinerator.

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

5.2.7 The facility shall install, calibrate and maintain a data acquisition system (DAS) or data management system (DMS) to service the HMIWI (Source Code: INC3) and its associated scrubber with ID No. RDA1. This system shall have the following minimum capabilities:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. The capability to accommodate all electronic monitoring device parameters required to be installed to monitor INC3 and RDA1.
[40 CFR 62.14454]

b. The capability of transferring data that was generated in an electronic form to an electronic storage media for historical retention.
[40 CFR 62.14461]

c. The capability of performing analyses of data for report generation purposes, including the calculation of rolling averages, three-hour averages, and the length of time any instrument was out of service during HMIWI operation.
[40 CFR 62.14463]

d. Paper media may be used as a backup for retention of this data when the electronic storage media is not available.
[40 CFR 62.14462]

5.2.8 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified in Table 5 of Condition 5.2.9. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. These devices must be part of the DAS/DMS required by Condition 5.2.7.
[40 CFR 70.6(a)(3)(i), 40 CFR 60.57c(a) and (b), and 391-3-1-.02(6)(b)1]

a. Outlet temperature of gases exiting the secondary chamber of the HMIWI (Source Code: INC3).

b. The weight of each charge inserted into the HMIWI (Source Code: INC3).

c. The total scrubber recirculation liquid flow rate.

d. The Scrubber Atomizer amperage.

e. The Scrubber liquor pH.

f. The bypass stack (hot stack) isolation damper position on the HMIWI (Source Code: INC3).

g. The scrubber outlet (exhaust fan flue gas inlet) temperature.

5.2.9 The Permittee shall ensure that the DAS/DMS collects the data with at least the minimum recording frequencies and averaging times outlined in Table 5 below.
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14453(a), 40 CFR 62.14454(a), Table 3 to 40 CFR 62 Subpart HHH, and 391-3-1-.02(6)(b)1]

Table 5
DAS / DMS Minimum Parametric Monitoring and Recording Frequencies

Parameter		Minimum Measuring Sample Rate	Minimum* Recording rate	Calculated Averaging Time
Description	Units			
HMIWI Secondary Chamber Temperature	Degrees Fahrenheit	Continuous	Once per minute	3 hour rolling average, calculated each operating hour.
HMIWI per charge weight and hourly charge rate	lbs and lb/hr	Per charge	Per charge and hourly	3 hour rolling average, calculated each operating hour.
Total Scrubber Recirculation Liquid Flow	Gallons per minute	Continuous	Once per minute	3 hour rolling average, calculated each operating hour.
Scrubber Atomizer Amperage	Amperes, AC	Continuous	Once per minute	3 hour rolling average, calculated each operating hour.
Scrubber Liquor pH	pH	Continuous	Once per minute	3 hour rolling average, calculated each operating hour.
Bypass-Stack Isolation Damper Position	% closed	Once per minute and upon position state change	Once per minute and upon position state change	N/A
Scrubber Outlet (Exhaust Fan Flue Gas Inlet) Temperature	Degrees Fahrenheit	Continuous	Once per minute	3 hour rolling average, calculated each operating hour.

*These recording frequencies are the minimums required. If data acquisition occurs more frequently, then that frequency should be used and all data should be averaged over the period specified.

5.2.10 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14454(a), and 391-3-1-.02(6)(b)1]

a. The primary chamber temperature (in Degrees Fahrenheit) of the HMIWI (Source Code: INC3). Data shall be recorded at least once per minute while INC3 is in operation.

b. The scrubber (ID No. RDA1) total differential pressure (in inches of water column) across Demisters #2 and #3; an alarm shall sound when the pressure drop exceeds 0.5 inches water column. Data shall be recorded at least once per minute while INC3 is in operation.

c. The RDA1 atomizer flow rate (in gallons per minute). Data shall be recorded at least once per minute while INC3 is in operation.

d. The make-up water flow rate (in gallons per minute) of the scrubber with ID No. RDA1. Data shall be recorded at least once per minute while INC3 is in operation.

PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.
[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.
[391-3-1-.03(10)(d)1.(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

b. Total process operating time during each reporting period.

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]

a. The date, place, and time of sampling or measurement;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions as existing at the time of sampling or measurement.

6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

i. None required to be reported in accordance with Condition 6.1.4.

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

Boilers and Emergency Generators

i. Any twelve consecutive month period during which the total hours of operation for any diesel engine driven generator (Source Codes: CG08 or CG09), as determined in accordance with Condition 6.2.2.b, exceeds 165 hours.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

ii. Any twelve consecutive month period during which the total NOx emissions from the diesel engine driven generators (Source Codes: CG01 through CG04), as determined in accordance with Condition 6.2.7.b, is equal to or exceeds 15.0 tons.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

iii. Any twelve consecutive month period during which the total NOx emissions from the boilers (Source Codes: BL01 and BL04), as determined in accordance with Condition 6.2.7.c, is equal to or exceeds 10.0 tons.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

iv. Any twelve consecutive month period during which the total NOx emissions from the boiler (Source Code: BL10), as determined in accordance with Condition 6.2.7.d, is equal to or exceeds 6.0 tons.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

v. Any twelve consecutive month period during which the total NOx emissions from the diesel engine driven generators (Source Codes: CG10 through CG14), as determined in accordance with Condition 6.2.7.e, is equal to or exceeds 9.0 tons.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

vi. Any twelve consecutive month period during which the total NOx emissions from the diesel engine driven generators (Source Codes: CG15 through CG17), as determined in accordance with Condition 6.2.7.f, is equal to or exceeds 6.0 tons.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

vii. Any period during which fuel oil burned in the boilers (Source Codes: BL01, BL04, and BL10) does not meet the specifications in Condition 3.2.2.
[PSD Avoidance - 40 CFR 52.21, 40 CFR 60.42c(d), and 391-3-1-.02(2)(g) 2.(subsumed)]

viii. Any period during which fuel oil burned in the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG14) does not meet the specifications in Condition 3.2.3.
[PSD Avoidance - 40 CFR Part 52.21 and 391-3-1-.02(2)(g) 2.(subsumed)]

ix. Any period during which fuel oil burned in the diesel engine driven generators (Source Codes: CG15 through CG17) does not meet the specifications in Condition 3.3.11.
[PSD Avoidance - 40 CFR 52.21, 40 CFR 60.4207(b), 40 CFR 80.510(b), and 391-3-1-.02(2)(g) 2.(subsumed)]

x. Any twelve consecutive month period during which the total consumption of fuel oil in the boilers (Source Codes: BL01, BL04, and BL10), combined, as determined in accordance with Condition 6.2.1.c, exceeds 957,000 gallons.
[PSD Avoidance - 40 CFR Part 52.21]

xi. Any period during which fuel oil burned in the boilers (Source Codes: BL02 and BL03) does not meet the specifications in Condition 3.2.5.
[391-3-1-.03(2)(c) and 391-3-1-.02(2)(g) 2.(subsumed)]

xii. Any twelve consecutive month period during which total hours of operation for each diesel engine driven generator (Source Codes: CG15 through CG17), during maintenance checks and readiness testing, as determined in accordance with Condition 6.2.3.b, exceeds 100 hours.
[40 CFR 60.4211(e)]

xiii. Any three-hour period during which the average NO_X emission rate from any of the boilers (Source Codes: BL01 and BL10) is equal to or greater than 30 ppm, corrected to 3% oxygen on a dry basis. This condition only applies May 1 through September 30 of each year. For the purposes of this condition, each clock hour begins a new three-hour period.
[391-3-1-.03(2)(lll)1.]

xiv. Operating any of the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG17) for reasons other than: (a) during emergency loss of electric power from the local utility, or (b) during preventive maintenance on the engine, or (c) during reliability operability testing of the engine.
[391-3-1-.03(2)(mmm)7.]

xv. Any twelve consecutive month period during which any of the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG17) operates for 200 or more hours.
[391-3-1-.03(2)(mmm)7.]

Incinerators INC1 and INC4

xvi. Any calendar quarter during which the quantity of Hospital/Medical/Infectious waste charged in either the incinerator (Source Code: INC1 or INC4) is equal to or exceeds 10 percent of the total waste burned in the incinerator.
[391-3-1-.02(2)(iii) avoidance]

xvii. Any measurement of the inlet temperature of the primary chamber of the incinerator (Source Code: INC1 or INC4) which falls below 750 degrees F (399 deg. C), measured in accordance with Condition 5.2.5.
[391-3-1-.02(2)(c)4.(ii)]

xviii. Any measurement of the outlet temperature of the secondary chamber of the incinerator (Source Code: INC1 or INC4) which falls below 1450 degrees F (788 deg. C), measured in accordance with Condition 5.2.5.
[391-3-1-.02(2)(c)4.(iii)]

xix. Any three-hour period during which the average charging rate for the incinerator (Source Code: INC1) is equal to or greater than the maximum mass input rate, in lbs/hr determined in accordance with Condition 3.2.7.d. For the purposes of this condition, each clock hour begins a new three-hour period.

xx. Any three-hour period during which the average charging rate for the incinerator (Source Code: INC4) is equal to or greater than the maximum mass input rate, in lbs/hr determined in accordance with Condition 3.2.7.e. For the purposes of this condition, each clock hour begins a new three-hour period.

xxi. Any time that the total mass charged to the incinerator (Source Code: INC1) exceeds 1000 pounds before shutting down to remove ash, in accordance with Condition 3.2.7.f.

xxii. Any time that the total mass charged to the incinerator (Source Code: INC4) exceeds 3,200 pounds before shutting down to remove ash, in accordance with Condition 3.2.7.g.

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

xxiii. Any occurrence of an operating limit exceedance that is specified in Condition 3.2.13.
[40 CFR 62.14455(d)(1) through (6)]

c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

Incinerators INC1 and INC4

i. Any occurrence of non-HMI waste (defined by Conditions 3.2.8 and 3.2.7.a) that contains any chlorine-containing plastics, except the plastic bags that wrap or bag the pathological waste, incinerated in the incinerators (Source Code: INC1 or INC4).
[Hazardous Air Pollutants Major Source Avoidance]

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

ii. Any time during normal operation of the HMIWI (Source Code: INC3) that it operated below the minimum secondary chamber temperature established per Condition 3.2.19.
[40 CFR 62.14451(e)(2) and 391-3-1-.02(2)(a)10]

iii. Any individual (instantaneous) reading of the monitor for the RDA1 make-up water flow rate that falls below the three hour average minimum determined during the most recent performance test on INC3/RDA1.
[40 CFR 62.14451(e)(2)]

d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

i. Any occurrence of waste loaded into the HMIWI (Source Code: INC3) before all applicable parameters have reached the acceptable ranges specified in Condition 3.2.15.

ii. Any time that the HMIWI (Source Code: INC3) or the scrubber with ID No. RDA1 are not operated within the parametric acceptable ranges specified in Condition 3.2.15 for at least four (4) hours after the last charge of waste was loaded into INC3.

iii. Any time that the alarm sounds indicating that the total pressure drop across Demisters #2 & #3 exceeds 0.5 inches water column, when the demisters are not cleaned before the next day's burn.

iv. Failures of any monitoring system to meet the criteria of Condition 3.2.23.

6.1.8 The Permittee shall provide the Division with a statement, in such form as the Director may prescribe, showing the actual emissions of nitrogen oxides and volatile organic compounds from the entire facility. These statements shall be submitted every year by the date specified in 391-3-1-.02(6)(a)4 and shall show the actual emissions of the previous calendar year.
[391-3-1-.02(6)(b)1(i)]

6.2 Specific Record Keeping and Reporting Requirements

Boilers and Emergency Generators

6.2.1 The Permittee shall use the natural gas and distillate fuel oil consumption meters required by Condition 5.2.1.a. and b. to determine and record the following:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. The Permittee shall record the total amount of natural gas burned in each of the boilers (Source Codes: BL01, BL04, and BL10) during each calendar month.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR and 40 CFR 60.48c(g)2.]

b. The Permittee shall record the total amount of distillate fuel oil burned in each of the boilers (Source Codes: BL01, BL04, and BL10), during each calendar month.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, PSD Avoidance - 40 CFR 52.21, and 40 CFR 60.48c(g)2.]

c. The Permittee shall determine and record, using the records obtained in accordance with Paragraph b above, the 12-consecutive month total amount of distillate fuel oil burned in the boilers (Source Codes: BL01, BL04, and BL10), combined, ending at each calendar month in the semiannual reporting period. A 12-consecutive month total shall be defined as the sum of a calendar month's total plus the totals for the previous eleven (11) consecutive months.
[PSD Avoidance - 40 CFR 52.21]

6.2.2 The Permittee shall use the hour meters required by Condition 5.2.1.c. and e. to determine and record the following:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. The total hours of operation for each diesel engine driven generator (Source Codes: CG01 through CG04 and CG08 through CG14) during each calendar month.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR and 391-3-1-.02(2)(mmm)7.]

b. The 12-consecutive month total operating hours of operation for each diesel engine driven generator (Source Codes: CG08 and CG09) ending at each calendar month in the semiannual reporting period. A 12-consecutive month total shall be defined as the sum of a calendar month's total plus the totals for the previous eleven (11) consecutive months.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR and 391-3-1-.02(2)(mmm)7.]

c. The combined total operating hours for the diesel engine driven generators (Source Codes: CG01 through CG04) during each calendar month.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

d. The combined total operating hours for the diesel engine driven generators (Source Codes: CG10 through CG14) during each calendar month.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

e. The total hours of operation for the diesel engine driven generator (Source Code: CG07) during each calendar month.

f. The 12-consecutive month total operating hours of operation for each of the diesel engine driven generators (Source Codes: CG01 through CG04, CG07, and CG10 through CG14) ending at each calendar month in the semiannual reporting period. A 12-consecutive month total shall be defined as the sum of a calendar month's total plus the totals for the previous eleven (11) consecutive months.
[391-3-1-.02(2)(mmm)7.]

6.2.3 The Permittee shall use the hour meters required by Condition 5.2.1.d. to determine and record the following:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. The total hours of operation, while doing maintenance checks/readiness testing, for each diesel engine driven generator (Source Codes: CG15 through CG17), at the end of every calendar month.
[40 CFR 60.4211(e)]

b. The 12-consecutive month total hours of operation, while doing maintenance checks/readiness testing (using the records obtained in accordance with Paragraph a above), for each diesel engine driven generator (Source Codes: CG15 through CG17), ending at each calendar month in the semiannual reporting period. A 12-consecutive month total shall be defined as the sum of a calendar month's total plus the totals for the previous eleven (11) consecutive months.
[40 CFR 60.4211(e)]

c. The total hours of operation, while run for emergency uses, for each diesel engine driven generator (Source Codes: CG15 through CG17), at the end of every calendar month.

d. The total hours of operation, while run for emergency uses, maintenance checks, and readiness testing, for each of the diesel engine driven generators (Source Codes: CG15 through CG17) ending at each calendar month.

e. The combined total operating hours, while run for emergency uses, maintenance checks, and readiness testing, for the diesel engine driven generators (Source Codes: CG15 through CG17), $H_{ENG, 15\text{-}17}$, during every calendar month.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

f. The 12-consecutive month total hours of operation for each of the diesel engine driven generators (Source Codes: CG15 through CG17) ending at each calendar month in the semiannual reporting period. A 12-consecutive month total shall be defined as the sum of a calendar month's total plus the totals for the previous eleven (11) consecutive months.
[391-3-1-.02(2)(mmm)7.]

6.2.4 Using data from monitoring required by Conditions 5.2.2 and 5.2.3, the Permittee shall determine and maintain records of the following information:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. The 1-hour average NOx emission rate for each of the boilers (Source Codes: BL01, BL04, and BL10), in the unit of pounds per million Btu, for each hour of operation.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

b. The 1-hour average NOx emission rate for each of the boilers (Source Codes: BL01 and BL10), in the unit of ppm corrected to 3 percent oxygen on a dry basis, for each hour of operation. (NOTE: this requirement only applies from May 1 to September 30 of each year.)
[391-3-1-.02(2)(lll)1.]

c. The results of the Relative Accuracy testing required by Conditions 5.2.2 and 5.2.3.

6.2.5 The Permittee shall use the monthly records required in Conditions 6.2.1.a, b, and 6.2.4.a to determine and maintain records of the total NOx emissions from each of the boilers (Source Codes: BL01, BL04, and BL10) for each calendar month. For purposes of this Permit, the Permittee shall use the following equation to compute monthly NOx emissions from BL01, BL04, and BL10:
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

$$ER_{BLR}\left(\frac{tons\ NOx}{month}\right) = \left[E_{NG} \times C_{NG} \times 1020\left(\frac{MM\ Btu}{10^6\ scf}\right) + E_{FO} \times C_{FO} \times 0.141\left(\frac{MM\ Btu}{gallon}\right)\right] \times \left(\frac{1\ ton}{2{,}000\ lbs}\right)$$

Where:

ER_{BLR} = Monthly NOx emissions from each boiler (in units of tons NOx/month)

E_{NG} = Average NO_X emissions from the boiler calculated by averaging the 1-hour emission rates predicted by the PEMS during a calendar month while firing natural gas (in units of lbs NOx/MMBtu).

C_{NG}= Quantity of natural gas consumed by the boiler during a calendar month (in units of MMscf/month).

E_{FO}= Average NO_X emissions from the boiler calculated by averaging the 1-hour emission rates predicted by the PEMS during a calendar month while firing distillate fuel oil (in units of lbs NOx/MMBtu).

C_{FO}= Quantity of distillate fuel oil consumed by the boiler during a calendar month (in units of gallons/month).

6.2.6 The Permittee shall use the monthly records required in Conditions 6.2.2.c, d, and 6.2.3.d to determine and maintain records of the total NOx emissions from the diesel engine driven generators (Source Codes: CG01 through CG04 and CG10 through CG17) for each calendar month. For purposes of this Condition, the Permittee shall use the following equation to compute monthly NOx emissions from CG01 through CG04 and CG10 through CG17:
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. For CG01 through CG04, use the following equation to calculate the NOx emissions per month of operation:

$$ER_{ENG,1-4}\left(\frac{tons\ NOx}{month}\right) = H_{ENG,1-4}\left(\frac{hours_{ENG}}{month}\right)\times 50.7\left(\frac{lbs\ NOx}{hour}\right)\times\left(\frac{1\ ton}{2{,}000\ lbs}\right)$$

Where:

$ER_{ENG,\ 1\text{-}4}$= NOx emissions emitted from CG01 through CG04 during the calendar month (in units of tons NOx/month).

$H_{ENG,\ 1\text{-}4}$= Number of hours, determined in accordance with Condition 6.2.2.c, that CG01 through CG04 operated during the calendar month.

b. For CG10 through CG14, use the following equation to calculate the NOx emissions per month of operation:

$$ER_{ENG,10-14}\left(\frac{tons\ NOx}{month}\right) = H_{ENG,10-14}\left(\frac{hours_{ENG}}{month}\right)\times 61.8\left(\frac{lbs\ NOx}{hour}\right)\times\left(\frac{1\ ton}{2{,}000\ lbs}\right)$$

Where:

$ER_{ENG,\ 10\text{-}14}$= NOx emissions emitted from CG10 through CG14 during the calendar month (in units of tons NOx/month).

$H_{ENG,\ 10\text{-}14}$= Number of hours, determined in accordance with Condition 6.2.2.d, that CG10 through CG14 operated during the calendar month.

c. For CG15 through CG17, use the following equation to calculate the NOx emissions per month of operation:

$$ER_{ENG,15-17}\left(\frac{tons\ NOx}{month}\right) = H_{ENG,15-17}\left(\frac{hours_{ENG}}{month}\right) \times 45.6\left(\frac{lbs\ NOx}{hour}\right) \times \left(\frac{1\ ton}{2{,}000\ lbs}\right)$$

Where:

$ER_{ENG,\ 15\text{-}17}$= NOx emissions emitted from CG15 through CG17 during the calendar month (in units of tons NOx/month).

$H_{ENG,\ 15\text{-}17}$= Number of hours, determined in accordance with Condition 6.2.3.d, that CG15 through CG17 operated during the calendar month.

6.2.7 The Permittee shall use the records required by Conditions 6.2.2.b, 6.2.5, and 6.2.6 to determine and maintain records of the following information:
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. The 12-consecutive month total operating hours for each diesel engine driven generator (Source Codes: CG08 and CG09) for each calendar month in the semiannual reporting period.

b. The 12-consecutive month total of NOx emissions (combined) from the diesel engine driven generators (Source Code: CG01 through CG04) for each calendar month in the semiannual reporting period.

c. The 12-consecutive month total of NOx emissions (combined) from the boilers (Source Codes: BL01 and BL04) for each calendar month in the semiannual reporting period.

d. The 12-consecutive month total of NOx emissions (combined) from the boiler (Source Code: BL10) for each calendar month in the semiannual reporting period.

e. The 12-consecutive month total of NOx emissions (combined) from the diesel engine driven generators (Source Codes: CG10 through CG14) for each calendar month in the semiannual reporting period.

f. The 12-consecutive month total of NOx emissions (combined) from the diesel engine driven generators (Source Codes: CG15 through CG17) for each calendar month in the semiannual reporting period.

For the purpose of this Permit, a 12-consecutive month total shall be defined as the sum of a calendar month's total plus the totals for the previous eleven (11) consecutive months.

6.2.8 The Permittee shall verify that each shipment of distillate fuel oil received for combustion in the boilers (Source Codes: BL01, BL04, and BL10) complies with the requirements of Condition 3.2.2. Verification shall consist of either of the following:
[PSD Avoidance - 40 CFR 52.21, 40 CFR 60.48c(f), 40 CFR 70.6(a)(3)(i), Avoidance of 40 CFR 63 Subpart JJJJJJ, 391-3-1-.02(2)(g)2.(subsumed), and 391-3-1-.02(6)(b)1.]

a. Fuel oil receipts obtained from the fuel supplier certifying that the oil is distillate fuel oil and contains less than or equal to 0.5% sulfur, by weight; or

b. Analysis of the distillate fuel oil conducted by methods of sampling and analysis which have been specified or approved by the Division which demonstrates that the distillate fuel oil contains less than or equal to 0.5% sulfur, by weight.

6.2.9 The Permittee shall verify that each shipment of distillate fuel oil received for combustion the diesel engine driven generators (Source Codes: CG01 through CG04 and CG7 through CG14) complies with the requirements of Condition 3.2.3. Verification shall consist of either of the following:
[PSD Avoidance - 40 CFR 52.21, 40 CFR 70.6(a)(3)(i), 391-3-1-.02(2)(g)2.(subsumed), and 391-3-1-.02(6)(b)1.]

a. Fuel oil receipts obtained from the fuel supplier certifying that the oil is distillate fuel oil and contains less than or equal to 0.5% sulfur, by weight; or

b. Analysis of the distillate fuel oil conducted by methods of sampling and analysis which have been specified or approved by the Division which demonstrates that the distillate fuel oil contains less than or equal to 0.5% sulfur, by weight.

6.2.10 The Permittee shall verify that each shipment of distillate fuel oil received for combustion in the diesel engine driven generators (Source Codes: CG15 through CG17) complies with the requirements of Condition 3.3.11. Verification shall consist of either of the following:
[PSD Avoidance, 40 CFR 60.4207(b), 40 CFR 70.6(a)(3)(i), 40 CFR 80.510(b), 391-3-1-.02(2)(g)2.(subsumed), and 391-3-1-.02(6)(b)1.]

a. Fuel oil receipts obtained from the fuel supplier certifying that the oil is distillate fuel oil and complies with the standards specified in Condition 3.3.11; or

b. Analysis of the distillate fuel oil conducted by methods of sampling and analysis which have been specified or approved by the Division which demonstrates that the distillate fuel oil complies with the standards specified in Condition 3.3.11.

6.2.11 The Permittee shall verify that each shipment of distillate fuel oil received for combustion in the boilers (Source Codes: BL02 and BL03) complies with the requirements of Condition 3.2.5. Verification shall consist of either of the following:
[40 CFR 70.6(a)(3)(i), 391-3-1-.02(2)(g)2.(subsumed), and 391-3-1-.02(6)(b)1.]

a. Fuel oil receipts obtained from the fuel supplier certifying that the oil is distillate fuel oil and contains less than or equal to 0.5% sulfur, by weight; or

b. Analysis of the distillate fuel oil conducted by methods of sampling and analysis which have been specified or approved by the Division which demonstrates that the distillate fuel oil contains less than or equal to 0.5% sulfur, by weight.

6.2.12 The Permittee shall maintain records sufficient to demonstrate compliance with the emission limit specified in Condition 3.2.6, for the boilers (Source Codes: BL01 and BL10). For each period during the months of May through September, where fuel oil is burned in either of the boilers (Source Codes: BL01 and BL10), said records shall indicate the amount of fuel oil burned, the date and time of each burn, and the reason for each burn. Fuel oil combustion in the above boilers during the months of May through September shall be reported to the Division within 7 business days.
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

6.2.13 The Permittee shall demonstrate compliance with the emission limits specified in Condition 3.3.10, for the diesel engine driven generators (Source Codes: CG15 through CG17) by keeping records of engine manufacturer data indicating compliance with these emission limits.
[40 CFR 60.4211(b)(3), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.14 The Permittee shall submit, with the report required by Condition 6.1.4, a semiannual report that contains the following records for the operation of the boilers (Source Codes: BL01, BL02, BL03, BL04, and BL10), and the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG17). The records shall be available for inspection or submittal to the Division upon request and contain:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. The 12-consecutive month total operating hours for each diesel engine driven generator (Source Codes: CG08 and CG09), determined in accordance with Condition 6.2.7.a, ending at each calendar month in the semiannual reporting period.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

b. The 12-consecutive month total of NOx emissions (combined) from the diesel engine driven generators (Source Codes: CG01 through CG04), determined in accordance with Condition 6.2.7.b, ending at each calendar month in the semiannual reporting period.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

c. The 12-consecutive month total of NOx emissions (combined) from the boilers (Source Codes: BL01 and BL04), determined in accordance with Condition 6.2.7.c, ending at each calendar month in the semiannual reporting period.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

d. The 12-consecutive month total of NOx emissions (combined) from the boiler (Source Code: BL10), determined in accordance with Condition 6.2.7.d, ending at each calendar month in the semiannual reporting period.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

e. The 12-consecutive month total of NOx emissions (combined) from the diesel engine driven generators (Source Codes: CG10 through CG14), determined in accordance with Condition 6.2.7.e, ending at each calendar month in the semiannual reporting period.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

f. The 12-consecutive month total of NOx emissions (combined) from the diesel engine driven generators (Source Codes: CG15 through CG17), determined in accordance with Condition 6.2.7.f, ending at each calendar month in the semiannual reporting period.
[391-3-1-.03(8)(c)13(ii) – avoidance of ozone non-attainment area NSR]

g. The fuel supplier certifications, as specified in Condition 6.2.8, for each shipment of distillate fuel oil received during the reporting period and a statement signed by a responsible official that the records of fuel supplier certifications submitted represent all of the fuel oil combusted in the boilers (Source Codes: BL01, BL04, and BL10) during the semiannual reporting period. If no fuel oil is combusted during the reporting period, the report shall so state.
[PSD Avoidance - 40 CFR 52.21, 40 CFR 60.48c(f), and 391-3-1-.02(2)(g)2.(subsumed)]

h. The 12-consecutive month total volume of distillate fuel oil burned in the boilers (Source Codes: BL01, BL04, and BL10), determined in accordance with Condition 6.2.1.c, ending at each calendar month in the semiannual reporting period.
[PSD Avoidance - 40 CFR 52.21]

i. The fuel supplier certifications, as specified in Condition 6.2.9, for each shipment of distillate fuel oil received during the reporting period and a statement signed by a responsible official that the records of fuel supplier certifications submitted represent all of the fuel oil combusted in the diesel engine driven generators (Source Codes: CG01 through CG04 and CG07 through CG14) during the semiannual reporting period. If no fuel oil is combusted during the reporting period, the report shall so state.
[PSD Avoidance - 40 CFR 52.21 and 391-3-1-.02(2)(g)2.(subsumed)]

j. The fuel supplier certifications, as specified in Conditions 6.2.10 for each shipment of distillate fuel oil received during the reporting period and a statement signed by a responsible official that the records of fuel supplier certifications submitted represent all of the fuel oil combusted in the diesel engine driven generators (Source Codes: CG15 – CG17) during the semiannual reporting period.
[PSD Avoidance, 40 CFR 60.4207(a) and (b), 40 CFR 80.510(a) and (b), and 391-3-1-.02(2)(g)2.(subsumed)]

k. The fuel supplier certifications, as specified in Condition 6.2.11, for each shipment of distillate fuel oil received during the reporting period and a statement signed by a responsible official that the records of fuel supplier certifications submitted represent all of the fuel oil combusted in the boilers (Source Codes: BL02 and BL03) during the semiannual reporting period. If no fuel oil is combusted during the reporting period, the report shall so state.
[391-3-1-.03(2)(c) and 391-3-1-.02(g)2.(subsumed)]

6.2.15 If the Permittee chooses to operate any engine driven generator for peaking or peak shaving, they shall comply with the NO_X emission limits contained in Georgia Air Quality Control Rule 391-3-1-.02(2)(mmm)1. For any of the engine driven generators listed in Table 3.1 that will be used for peaking or peak shaving, the Permittee shall submit an application demonstrating how the Permittee plans to meet that limit. If such an application is submitted, the Permittee shall not operate it until the Division issues an operating permit for such operation by that engine driven generator.
[391-3-1-.03(1) through (8)]

Incinerators INC1 and INC4

6.2.16 The Permittee shall keep records of the following types of waste incinerated in each incinerator (Source Codes: INC1 and INC4), and calculate the total weight of each category of waste burned on a calendar quarterly basis in each incinerator:
[40 CFR 70.6(a)(3)(i), 391-3-1-.02(2)(iii) avoidance, and 391-3-1-.02(6)(b)1.]

a. Hospital/Medical/Infectious Waste as defined by 40 CFR 60, Subpart Ec.

b. Total waste incinerated.

6.2.17 The Permittee shall use the records required by Condition 6.2.16 to calculate the percentage of Hospital/Medical/Infectious waste burned in each of the incinerators (Source Codes: INC1 and INC4) during each calendar quarter.
[40 CFR 70.6(a)(3)(i), 391-3-1-.02(2)(iii) avoidance, and 391-3-1-.02(6)(b)1.]

6.2.18 The Permittee shall maintain an operator's log to track primary chamber cleaning records for the incinerators (Source Codes: INC1 and INC4). Such records must be recorded each time the incinerators are cleaned out and must indicate the total mass (lbs) charged since the last primary chamber clean-out. This data shall be recorded in a suitable manner acceptable to the Division and be available for inspection by or submission to the Division upon request.
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

6.2.19 The Permittee shall submit, with the report required by Condition 6.1.4, a semiannual report that contains the following records for the operation of the incinerators (Source Codes: INC1 and INC4). The records shall be available for inspection or submittal to the Division upon request and contain:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. The weight (pounds) of waste charged in each incinerator (Source Codes: INC1 and No. INC4), for each quarter in the semiannual reporting period, indicating quantities of:
[391-3-1-.02(2)(iii) avoidance]

i. Hospital/Medical/Infectious Waste as defined by 40 CFR 60, Subpart Ec.

ii. Total waste incinerated.

b. The percentage of Hospital /Medical/ Infectious waste burned in each of the incinerators (Source Codes: INC1 and INC4) during each calendar quarter.
[391-3-1-.02(2)(iii) avoidance]

c. A statement by a responsible official, with that official's name, title, and signature, certifying that all non-HMI waste (defined by Conditions 3.2.7 and 3.2.8) burned in the incinerators (Source Codes: INC1 and INC4), during the semiannual period, contains no chlorine-containing plastics except the plastic bags that wrap or bag the pathological waste.
[Hazardous Air Pollutants Major Source Avoidance]

Hospital/Medical/Infectious Waste Incinerator (HMIWI) INC3

6.2.20 The Permittee shall, in accordance with Condition 6.1.6, maintain the following information during the operation and malfunction of the HMIWI (Source Code: INC3):
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14460, and 391-3-1-.02(6)(b)1.]

a. Calendar date of each record.

b. Charge dates, charge times, charged weights and hourly charge rates.

c. The monitoring parameters required to be recorded per Conditions 5.2.8 through 5.2.10.

d. Records of the calibration results and methods used for calibrating monitoring systems and devices described in Paragraphs b. and c. above.

e. The date and time that any startup, shutdown or malfunction event was initiated and ended. For a definition of startup, shutdown and malfunction refer to the Definitions Table contained in Attachment A of this permit.

Note: The information required by Paragraphs b. and c**.** above shall be recorded commencing with the initiation of the first charge when starting up the incinerator, after shutdown, while combusting waste, and until four hours after the last charge or until waste has been combusted, whichever is longer, before shutdown.

6.2.21 The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the HMIWI (Source Code: INC3) and any malfunction of the air pollution control equipment or any periods during which a DAS/DMS or monitoring device was inoperative. Said records shall be included as part of the startup, shutdown and malfunction documentation required to be maintained and retained by the Permittee for at least five years after the date of any such startup, shutdown, malfunction, or measurements. These records shall contain data that are adequate to demonstrate, as a minimum, the following:
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14420, 40 CFR 62.14460, and 391-3-1-.02(6)(b)1.]

a. Dates and times each shutdown was initiated and whether or not the shutdown was consistent with Condition 3.2.16.

b. Dates and times the initial waste charge was placed into the incinerator at startup and whether or not the startup met the acceptable operating parameter range limitations for startup contained in Condition 3.2.15.

c. Dates, times and length of time of each malfunction and whether or not waste was charged during the malfunction, as per Condition 3.2.17.

d. Dates and times that the Scrubber RDA1 was not in operation while the HMIWI (Source Code: INC3) was in operation, as required by Condition 3.2.9.

e. Documentation that a qualified operator was present or available within one hour while the HMIWI (Source Code: INC3) was in operation, as required by Condition 3.2.18.

6.2.22 The Permittee shall keep documentation of the as-built configuration and specifications of all monitoring devices installed to meet the monitoring requirements contained in this permit. This documentation should include, at a minimum:
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14454, and 391-3-1-.02(6)(b)1.]

a. Components such as sensors, signal conditioning units, recording devices and computation modules contained in each instrument loop.

b. Performance specifications and design features of the DAS/DMS computer system allowing it to meet the monitoring requirements contained in this permit.

c. Procedures which are used to perform operational checks, calibrations, maintenance and replacement of the devices. This must be part of the documents specified in Condition 6.2.21.

6.2.23 The Permittee shall maintain operations/monitoring documentation on the HMIWI (Source Code: INC3) and scrubber with ID No. RDA1 in accordance with Condition 3.3.3. The documentation shall be in a readily accessible and usable form for all HMIWI operators to use during operation, maintenance, and training review. This documentation shall be available for inspection by the Division and must contain at least the following:
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14424, and 391-3-1-.02(6)(b)1.]

a. Summary of the applicable standards for the HMIWI.

b. Description of the basic combustion theory applicable to the HMIWI.

c. Procedures for receiving, handling, and charging waste.

d. HMIWI startup, shutdown, and malfunction procedures.

e. Procedures for maintaining proper combustion air supply levels in the HMIWI.

f. Procedures for operating the HMIWI and the associated scrubber, within the limitations designated in Conditions 3.2.14 through 3.2.18.

g. Procedures for responding to periodic malfunctions or conditions that may lead to a malfunction.

h. Procedures for monitoring the HMIWI emissions.

i. Reporting and record keeping procedures to comply with Conditions in Sections 5.0 and 6.0 of this permit.

j. Procedures for handling bottom and fly ash.

k. Procedures for maintaining an inventory of chemicals (i.e., sodium hydroxide) used for operation of the scrubber system.

l. A Preventive Maintenance Program for the scrubber.

6.2.24 The Permittee shall establish a program for reviewing the information required in Condition 6.2.23, on an annual basis, with the qualified HMIWI operator(s). The Permittee shall keep records that the annual review was done and keep those records for 5 years from the date of training.
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14425, and 391-3-1-.02(6)(b)1.]

6.2.25 The Permittee shall submit, with the report required by Condition 6.1.4, a semiannual report that contains the following records for the operation of the HMIWI (Source Code: INC3). For any of the data below that is submitted with the report required by Condition 6.1.4, this data need not be duplicated in this report. The records shall be available for inspection or submittal to the Division upon request and contain:
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14464(b) and (c), and 391-3-1-.02(6)(b)1.]

a. The site specific parametric operating limit values, established per Condition 4.2.7 for the parameters recorded during the initial performance testing and the following annual performance testing.

b. The highest maximum or lowest minimum operating parameter, as applicable, for each operating parameter required to be recorded by the DAS for each parameter monitored per Condition 5.2.9.

c. The highest maximum or lowest minimum operating parameter measured or averaged, as applicable, for each operating parameter required to be recorded by the DAS for the three previous reporting periods. The data provided shall be in a form suitable for the Division to review the performance of the facility over a 2-year period.

d. Identification of the calendar days, times and durations for which the following exceedances occurred:

i. The emission rate or operating parameter data, required per Condition 5.2.9**,** have not been obtained. The records must identify which emission rates or operating parameters were not measured, the cause for not obtaining the data, and a description of corrective actions taken.

ii. A malfunction occurs. Include a description of the malfunction and the corrective action taken.

iii. The emission rate or operating parameter data exceeded an applicable limit per Conditions 3.2.12, 3.2.13 and 3.2.19. The records must describe each exceedance, the cause for that exceedance, and a description of corrective action(s) taken.

e. If no exceedances occurred during the reporting period per Paragraph d above, the Permittee shall provide a statement that no exceedances occurred during the reporting period.

f. Any information recorded under Paragraph d above, for the three previous reporting periods, in order to provide the Division with a summary of the performance of the affected facility over a 2-year period.

g. The performance test results from any tests performed during the reporting period.

h. Any use of the bypass stack (by opening the isolation damper during incinerator operation), the duration of its use and the reason for its use. If the usage occurred as a result of a malfunction or usage violation (per Conditions 3.2.13 and 3.2.17) provide any corrective actions taken.

6.2.26 The Permittee shall maintain records documenting the training and qualification of operators at the facility as required by Conditions 3.2.18, 3.3.4, 3.3.5, 3.3.6, 6.2.23 and 6.2.24. The records shall contain, as a minimum:
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14460(g) through (i), and 391-3-1-.02(6)(b)1.]

a. Records showing the names of qualified HMIWI operators, per Conditions 3.3.4, 3.3.5 and 3.3.6. Included in the records must be the dates of the initial qualification, re-qualification and initial operator training, used to become a qualified HMIWI operator. Accompanying the initial operator training record must be documentation showing the content of the initial operator training course.

b. Records showing the dates that each qualified HMIWI operator underwent their annual review programs, as required by Condition 6.2.24.

c. Records showing the names of the qualified HMIWI operators that have fulfilled annual operator refresher training requirements in accordance with Condition 3.3.6. Included in the record must be documentation of training content and the dates training occurred.

6.2.27 The Permittee shall maintain and update the waste management plan (WMP) required by Condition 3.3.8. This documentation shall be available for inspection by the Division.
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14430, and 391-3-1-.02(6)(b)1.]

6.2.28 The Permittee shall maintain documentation regarding how the facility ensures that the waste stream combusted during testing is representative of the waste stream characterized by the most recent WMP analysis. Upon request by the Division, the Permittee shall submit a written explanation regarding steps taken to ensure that the waste combusted during any test was representative.
[40 CFR 70.6(a)(3)(i), 40 CFR 62.14431, and 391-3-1-.02(6)(b)1.]

PART 7.0 OTHER SPECIFIC REQUIREMENTS

7.1 Operational Flexibility

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and the changes do not exceed the emissions allowable under the Permit (whether expressed therein as a rate of emissions or in terms of total emissions). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.

b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.

b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the Permit shield in Condition 8.16.1.

d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act.
[Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

7.3 Alternative Requirements
[White Paper #2]

None applicable.

7.4 Insignificant Activities
(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

None applicable.

7.5 Temporary Sources
[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

None applicable.

7.6 Short-term Activities
(see Form D5 "Short Term Activities" of the Permit application and White Paper #1)

None applicable.

7.7 Compliance Schedule/Progress Reports
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None applicable.

7.8 Emissions Trading
[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

None applicable.

7.9 Acid Rain Requirements

None applicable.

7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)
[391-3-1-.02(10)]

7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.

a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.

b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a. and the following additional requirements:

i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)

c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170

d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175

e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*eSubmit (information for establishing an account can be found at www.epa.gov/emergencies/content/rmp/rmp_esubmit.htm). Electronic Signature Agreements should be mailed to:

MAIL

Risk Management Program (RMP) Reporting Center
P.O. Box 10162
Fairfax, VA 22038

COURIER & FEDEX

Risk Management Program (RMP) Reporting Center
CGI Federal
12601 Fair Lakes Circle
Fairfax, VA 22033

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: “MVAC-like appliance” is defined in 40 CFR 82.152.]

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

Air Quality Permit and Amendment Number(s)	Dates of Original Permit or Amendment Issuance
9431-089-0005-V-02-0	February 11, 2009
9431-089-0005-V-02-1	August 11, 2009

7.13 Pollution Prevention

None applicable.

7.14 Specific Conditions

None applicable.

PART 8.0 GENERAL PROVISIONS

8.1 Terms and References

8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.

8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence. [391-3-1-.02(2)(a)2]

8.2 EPA Authorities

8.2.1 Except as identified as "State-only enforceable" requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]

8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, "Inspections, Monitoring, and Entry."
[40 CFR 70.6(f)(3)(iv)]

8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, "Emergency Powers."
[40 CFR 70.6(f)(3)(i)]

8.3 Duty to Comply

8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]

8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]

8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

8.4 Fee Assessment and Payment

8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."
[391-3-1-.03(9)]

8.5 Permit Renewal and Expiration

8.5.1 This Permit shall remain in effect for five (5) years from the effective date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]

8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]

8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

8.6 Transfer of Ownership or Operation

8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary, and provided that a written agreement containing a specific date for transfer of Permit responsibility coverage and liability between the current and new Permittee has been submitted to the Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

8.7 Property Rights

8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

8.8 Submissions

8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

Georgia Department of Natural Resources
Environmental Protection Division
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

Air and EPCRA Enforcement Branch – U. S. EPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104

8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

8.9 Duty to Provide Information

8.9.1 The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the Permit application, shall promptly submit such supplementary facts or corrected information to the Division.
[391-3-1-.03(10)(c)5]

8.9.2 The Permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall also furnish to the Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

8.10 Modifications

8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

8.11 Permit Revision, Revocation, Reopening and Termination

8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]

a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if the effective date of the requirement is later than the date on which the Permit is due to expire, unless the original permit or any of its terms and conditions has been extended under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]

b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)

c. The Director determines that the Permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]

d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]

8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]

8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (30) days in advance of the date the Permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
[391-3-1-.03(10)(e)6(iii)]

8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]

8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.

8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

8.12 Severability

8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

8.13 Excess Emissions Due to an Emergency

8.13.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]

8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]

a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;

b. The Permitted facility was at the time of the emergency being properly operated;

c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the Permit; and

d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]

8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

a. The identification of each term or condition of the Permit that is the basis of the certification;

b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;

c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;

d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and

e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]

i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.

b. No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for Permit revocation and assessment of civil penalties.
[391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]

b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]

c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that: [391-3-1-.02(2)(a)7(i)]

i. The best operational practices to minimize emissions are adhered to;

ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and

iii. The duration of excess emissions is minimized.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control. [391-3-1-.02(2)(a)7(ii)]

c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards. [391-3-1-.02(2)(a)7(iii)]

8.15 Circumvention

State Only Enforceable Condition

8.15.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere. [391-3-1-.03(2)(c)]

8.16 Permit Shield

8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit. [391-3-1-.03(10)(d)6]

8.16.2 Any Permit condition identified as “State only enforceable” does not have a Permit shield.

8.17 Operational Practices

8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

State Only Enforceable Condition

8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia's Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]

8.18 Visible Emissions

8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

8.19 Fuel-burning Equipment

8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

8.20 Sulfur Dioxide

8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

8.21 Particulate Emissions

8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.
[391-3-1-.02(2)(e)]

a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour.
$E = 55P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$E = 4.1P^{0.67}$

In the above equations, E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

8.22 Fugitive Dust

[391-3-1-.02(2)(n)]

8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

8.23 Solvent Metal Cleaning

8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser subject to the requirements of Georgia Rule 391-3-1-.02(2)(ff) "Solvent Metal Cleaning" unless the following requirements for control of emissions of the volatile organic compounds are satisfied:
[391-3-1-.02(2)(ff)1]

a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,

b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,

c. If the solvent volatility is 0.60 psi or greater measured at 100 ºF, or if the solvent is heated above 120 ºF, then one of the following control devices must be used:

i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or

ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or

iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.

d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and

e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

8.24 Incinerators

8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]

a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.

b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.

8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.

8.24.3 No person shall cause or allow particles to be emitted from an incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" which are individually large enough to be visible to the unaided eye.

8.24.4 No person shall operate an existing incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" unless:

a. It is a multiple chamber incinerator;

b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800^{o}F; and

c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500^{o}F in the secondary chamber.

8.25 Volatile Organic Liquid Handling and Storage

8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Georgia Rule 391-3-1-.02(2)(vv) "Volatile Organic Liquid Handling and Storage" is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

8.26 Use of Any Credible Evidence or Information

8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart IIII – "Standard of Performance for Stationary Compression Ignition Internal Combustion Engines." Such requirements include but are not limited to:
[40 CFR 60.4200, 391-3-1-.02(8)(b)77]

a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart IIII.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart IIII.

c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart IIII.

d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart IIII. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as "emergency generators" for the purposes of Ga Rule 391-3-1-.02(2)(mmm).

e. Maintain any records in accordance with Subpart IIII

f. Maintain a list of engines subject to 40 CFR 60 Subpart IIII, including the date of manufacture.[391-3-1-.02(6)(b)]

8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart JJJJ - "Standard of Performance for Stationary Spark Ignition Internal Combustion Engines," for spark ignition internal combustion engines(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230, 391-3-1-.02(8)(b)79]

8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart ZZZZ - "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

For diesel-fired emergency generator engines defined as "existing" in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for <500hp engines at major sources, and constructed prior to December 19, 2002 for >500hp engines at major sources of HAP), such requirements include but are not limited to:
[40 CFR 63.6580, 391-3-1-.02(9)(b)118]

a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart ZZZZ.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.

c. Conduct the following in accordance with Subpart ZZZZ.

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

ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary

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

d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart ZZZZ. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as "emergency generators" for the purposes of Ga Rule 391-3-1-.02(2)(mmm).

e. Maintain any records in accordance with Subpart ZZZZ

f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.[391-3-1-.02(6)(b)]

8.28 Boilers and Process Heaters

8.28.1 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart JJJJJJ - "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers."
[40 CFR 63.11193]

8.28.2 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart DDDDD - "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters."
[40 CFR 63.7480]

Attachments

A. List of Standard Abbreviations and List of Permit Specific Abbreviations
B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
C. List of References

ATTACHMENT A

List Of Standard Abbreviations

AIRS	Aerometric Information Retrieval System
APCD	Air Pollution Control Device
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BTU	British Thermal Unit
CAAA	Clean Air Act Amendments
CEMS	Continuous Emission Monitoring System
CERMS	Continuous Emission Rate Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System(s)
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
dscf/dscm	Dry Standard Cubic Foot / Dry Standard Cubic Meter
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
gr	Grain(s)
GPM (gpm)	Gallons per minute
H_2O (H2O)	Water
HAP	Hazardous Air Pollutant
HCFC	Hydro-chloro-fluorocarbon
MACT	Maximum Achievable Control Technology
MMBtu	Million British Thermal Units
MMBtu/hr	Million British Thermal Units per hour
MVAC	Motor Vehicle Air Conditioner
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x (NOx)	Nitrogen Oxides
NSPS	New Source Performance Standards
OCGA	Official Code of Georgia Annotated

PM	Particulate Matter
PM_{10} (PM10)	Particulate Matter less than 10 micrometers in diameter
PPM (ppm)	Parts per Million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RMP	Risk Management Plan
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2 (SO2)	Sulfur Dioxide
USC	United States Code
VE	Visible Emissions
VOC	Volatile Organic Compound

List of Permit Specific Abbreviations

CDC	Centers for Disease Control
Cd	Cadmium
CDD	Chlorinated dibenzo-p-dioxin
CDF	Chlorinated dibenzo-furan
DAS/DMS	Data Acquisition System / Data Management System
gr/dscf	Grains per dry standard cubic foot; there are 7000 grains per pound.
Hg	Mercury
HMIWI	Hospital/Medical/Infectious Waste Incinerator
NAA	Non-Attainment Area

ng/dscm	Nanograms per dry standard cubic meters; the nano prefix indicates 10^{-9}.
NSR	New Source Review
Pb	Lead
PEMS	Predictive Emission Monitoring System
RATA	Relative Accuracy Test Audit

List of Permit Specific Definitions

Term	Definition	Citation
Activation	Activation of the incinerator is when power is physically turned on to the control circuitry of the incinerator.	
Clock-hour	A clock-hour is the 60 minute period that begins at 00:00 hours Greenwich Mean Time (i.e. on the hour).	62.01 60.02
Intermittent Mode of operation	Intermittent HMIWI means an HMIWI that is designed to allow waste charging, but not ash removal, during combustion. In other words, the incinerator has an automatic ram loader to allow automatic loading of multiple charges of waste but does not have an automatic ash removal system. The incinerator must shut down periodically because ash accumulates in the primary chamber and will hinder proper combustion of the waste.	62.14490
Malfunction	Basic Definition of a Malfunction: *Failure of a process to operate in a normal or usual manner.* According to the HMIWI rules, a malfunction is when the system is in operation and not performing as it was intended and is not in startup or shutdown modes of operation and if this was not caused by poor maintenance or careless operation. The compliance program of the Air Protection Branch views malfunctions as either excusable or not excusable, which is a case-by-case determination, the outcome depending on a number of factors (including whether the Permittee made all reasonable efforts to minimize excess emissions). However, the HMIWI rule specifies that if an event is not excusable, it does not fit the definition of "malfunction" for that rule. Non-excusable events are those caused by poor maintenance and/or operator error due to poor training [see 391-3-1-.02(a)7(ii) and 62.14490]. However, an event that is caused by failures of the equipment due to faster than expected wear, or manufacturer design defects, or acts of nature is considered an excusable "malfunction." In that case, the emission limits are not applicable during the event [see 391-3-1-.02(a)7(i) and 62.14490]. For the HMIWI rules, a malfunction is when the monitoring parameters indicate that the system parameters are unintentionally above or below their respective lower or higher limits, which had been determined by the most recent performance test. Note that monitoring of operating parameters should always continue throughout any malfunction, excused or not.	62.14490
Normal operation cycle	The period beginning when the first charge is placed in the incinerator until the last contiguous charge has been completely combusted and the incinerator placed in shutdown mode. Included in an operating cycle are any short-term malfunctions that the incinerator system recovers from, in which charging continues to take place. In the case of a malfunction causing a complete failure of the system, the operating cycle continues until the waste is completely combusted or the combustion process ends. During such abnormal operation, monitoring must be continued until shutdown is complete.	N/A
Operating Hour	The time period the incinerator was in the operation mode in any clock hour.	62.01, 60.02

Term	Definition	Citation
Operating Day	The time period the incinerator was in the operation mode in any calendar day, essentially beginning and ending at midnight.	
Operation	When the system is in operating and performing its intended function (not in startup or shutdown modes of operation). Operation includes both "normal operation" defined above and any incinerator / scrubber "malfunction" periods, as defined above.	62.14490
Qualified HMIWI Operator	An operator who meets the training and experience requirements contained in 40 CFR 62.14421. These requirements are fulfilled if the facility complies with Conditions 3.2.18, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 6.2.24, 6.2.25, and 6.2.26.	62.14421
Shutdown	Is the period of time after all waste has been combusted; it can begin no less than 4 hours after the last charge was placed into an HMIWI that operates in the intermittent mode of operation. The shutdown mode of operation ends when ash has been removed from the primary chamber (if operated up to 1000 pounds or less) and / or the HMIWI is placed into startup mode of operation again.	62.14490
Startup	"Startup" begins when the incinerator is activated, including the pre-operation heat-up of the incinerator, and ends when the first charge is placed into the primary chamber. For an intermittent incinerator that has only been shut down to remove ash and is firing back up, "Startup" is the time between the completion of Shutdown and the beginning of Normal Operation.	62.14490
Three-hour rolling average	To calculate a three-hour rolling average, the average of the data recorded during each clock-operating-hour is first calculated. That would be done by summing the data points recorded for each individual clock hour (during any normal operation cycle) and then dividing that by the number of data points during that clock hour. For a clock operating hour average to be valid, there must be data points in at least two quadrants of that clock hour during normal operation. The Division has determined that a three-hour average is the average of three consecutive clock operating hour averages. Regarding periods that the incinerator system is shut down, of for which sufficient data is unavailable, a three-hour rolling average must be calculated utilizing clock-hour averages that are not contiguous (such as one from the end of an operating cycle and two from the beginning of the next cycle).	62.14453(a)(2)

ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	0
Combustion Equipment	1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	0
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a "designated facility" as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows:	0
	i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste.	0
	ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste.	0
	iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	0
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	0
	4. Stationary engines burning:	0
	i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	0
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	0
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	0
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	0
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	0
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	0
	2. Portable blast-cleaning equipment.	0
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	0
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	0
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	0
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	0
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	0

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	0
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	5 Buildings
Pollution Control	1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	0
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour:	0
	i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	0
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	0
	iii) Kilns for firing ceramic ware.	0
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	0
	v) Bakery ovens and confection cookers.	0
	vi) Feed mill ovens.	0
	vii) Surface coating drying ovens	0
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that: i) Activity is performed indoors; & ii) No significant fugitive particulate emissions enter the environment; & iii) No visible emissions enter the outdoor atmosphere.	0
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	0
	5. Grain, food, or mineral extrusion processes	0
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	0
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	0
	8. Ozonization process or process equipment.	0
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	0
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	0
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	0
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	0
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	0

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	27
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	0
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	0
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	0
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	0

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity

ATTACHMENT B (continued)

GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
N/A	N/A	N/A	N/A	N/A

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d).Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	0
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	0
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	4

ATTACHMENT C

LIST OF REFERENCES

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.

2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.

3. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.***

4. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees***.

5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/ap42/index.html*.

6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/software/tanks/index.html*.

7. The Clean Air Act (42 U.S.C. 7401 et seq).

8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).

9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).