

Facility Name: **Centers for Disease Control and Prevention - Roybal**
City: Atlanta
County: Dekalb
AIRS #: 04-13-089-00005

Application #: TV-22066
Date Application Received: August 6, 2013
Permit No: 9431-089-0005-V-03-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Centers for Disease Control and Prevention - Roybal** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification****1. Facility Name:**

Centers for Disease Control and Prevention - Roybal

2. Parent/Holding Company Name:

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

3. Previous and/or Other Name(s):

Centers for Disease Control and Prevention - Clifton

4. Facility Location

1600 Clifton Road N.E., Atlanta, Georgia 30333.

5. Attainment or Non-attainment Area Location

This facility is located in Dekalb County, a non-attainment area for ozone (NO_x and VOC are regulated precursors) and PM_{2.5}; and an attainment area for CO, SO₂, PM, PM₁₀, and lead.

B. Site Determination

There are three facilities in the Atlanta area under common control of the U.S. Centers for Disease Control and Prevention (CDC). The facilities are not contiguous or adjacent, they are considered separate sites with respect to Title V, and they each have a separate air quality permit. They are the CDC Roybal (AIRS No. 089-00005), CDC Lawrenceville (AIRS No. 135-00008), and CDC Chamblee (AIRS No. 089-00028) facilities. CDC Roybal is the only site considered a major source that operates under a Title V permit.

C. Existing Permits

Table 1 below lists all current Title V Permits, all Amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits as Amended

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
9431-089-0005-V-02-0	February 11, 2009	x	
9431-089-0005-V-02-1	August 11, 2009	x	

Table 2: Comments on Specific Permits

Permit Number	Comments
9431-089-0005-V-02-0	Title V Renewal.
9431-089-0005-V-02-1	The construction and operation of a pathological waste incinerator INC4.

D. Process Description

1. SIC Codes(s)

9431

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

The U.S. Centers for Disease Control and Prevention - Roybal Campus is primarily a research facility that is focused on promoting health through the prevention of disease, injury, and disability.

3. Overall Facility Process Description

The Centers for Disease Control and Prevention – Roybal (CDC) 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 containment¹, 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 require once-through ventilation systems which require a large amount of peak heating capacity and peak cooling and dehumidifying capability sufficient for winter and summer condition, 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.

The facility uses nine boilers (BL01, BL02, BL03, BL04, BL10, and four insignificant boilers [0.6 MMBtu/hr each]) with a total heat input capacity of 360.62 MMBtu/hr. Each boiler primarily fires natural gas, and has the ability to fire distillate fuel oil as a backup fuel. Boilers BL01, BL04, and BL10 are equipped with Low-NO_x Burners.

The facility uses 15 emergency diesel generators (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.

The autoclaves and three incinerators (INC1, INC3, and INC4) are used to treat pathological waste generated during research. The operation of incinerators 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 incinerators 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. Incinerator 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). 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.

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.

Note: The facility previously operated two boilers (BL08 and BL09) and an incinerator (INC2) that were removed from the site and are now removed from this permit. In this permit renewal the facility requested to change the Source Codes for the generators currently identified as “CG03, CG04, CG05, and CG06” to “CG01, CG02, CG03, and CG04”, and the boiler identified as “BL07” to “BL01” to match the facility’s new identification system.

4. Overall Process Flow Diagram (optional)

The facility did not provide a process flow diagram in the initial Title V permit application

E. Regulatory Status

1. PSD/NSR

CDC Roybal is located in Dekalb County, a non-attainment area for ozone and PM_{2.5}. The facility is major for nitrogen oxides (NO_x) under non-attainment area new source review (NAA NSR) because potential NO_x emissions exceed 25 tpy per GA Rule 391-3-1-.03(8)(c)13(i). Emissions caps and operational restrictions were added over the years to avoid NAA NSR by making sure net emissions increases of NO_x associated with each new project did not exceed 25 tons when aggregated over any period of 5 consecutive calendar years per GA Rule 391-3-1-.03(8)(c)13(ii):

ID No.	Year	Work Practices		NO _x Emission Limits	
		Standard	Legal Authority	Limits	Legal Authority
BL02 – BL03	1958	Nat. Gas (Dist.Oil Backup) Annual tune-up (Feb-May)	40 CFR 63.11195(e) 391-3-1-.02(2)(yy)1	-	-
CG07 INC1	1987 1988	200 hours/year -	391-3-1-.02(2)(mmm)7. -	- -	- -
CG08 – CG09 CG01 – CG04*	1995 1998	165 hours/year (each) 200 hours/year (each)	NAA NSR Avoidance 391-3-1-.02(2)(mmm)7.	- < 15 tpy	- NAA NSR Avoidance
BL01* and BL04	2001	Nat. Gas (Dist.Oil Backup) Annual tune-up (Feb-May)	40 CFR 63.11195(e) 391-3-1-.02(2)(yy)1 [BL04]	< 10 tpy 30 ppm@3%O ₂	NAA NSR Avoidance 391-3-1-.03(2)(III)1 [BL01]
BL10	2004	Nat. Gas (Dist.Oil Backup) Nat. Gas Only (May-Sept)	40 CFR 63.11195(e) 391-3-1-.03(2)(III)	< 6 tpy 30 ppm@3%O ₂	NAA NSR Avoidance 391-3-1-.03(2)(III)1
CG10 – CG11 CG12 – CG14	2004 2005	200 hours/year (each)	391-3-1-.02(2)(mmm)7.	< 9 tpy	NAA NSR Avoidance
INC3**	2006	250 ppmv @ 7% O₂	391-3-1-.02(2)(yy)1 (RACT based on NSPS Ec)	190 ppmv @ 7% O₂	40 CFR 62 Subpart HHH
CG15 – CG17	2007	200 hours/year (each)	391-3-1-.02(2)(mmm)7.	< 6 tpy 9.2 g/HP-hr	NAA NSR Avoidance 40 CFR 60 Subpart IIII
INC4	2009	-	-	-	-

*Emergency generators previously identified as CG03 though CG06 are now identified as CG01 through CG04. Boiler previously identified as BL07 is now identified as BL01.

**INC3 is now subject to more stringent federal plan standard in 40 CFR 62 Subpart HHH instead of previously approved RACT standard based on 40 CFR 60 Subpart Ec.

The permit contains NO_x NAA NSR avoidance limits for the boilers (BL01, BL04, and BL10) and emergency generators (CG01 through CG04 and CG08 through CG17) [*Cond. 3.2.1*]. Past NAA NSR avoidance was also based on a NO_x RACT limit for the hospital/medical/infectious waste incinerator (INC3) set as equivalent to the emission standard (of 250 ppmv at 7 percent oxygen) in 40 CFR 60 Subpart Ec. INC3 is now subject to a more stringent Federal Plan limit of 190 ppmv at 7 percent oxygen per 40 CFR 62 Subpart HHH [*Cond. 3.2.10, Table 1, Row 4*]. All previously established NAA NSR avoidance caps remain in place even if the facility removed two boilers (BL08 and BL09), and adopted more stringent Federal Plan limits for INC3.

The facility is minor for VOC under NAA NSR because potential VOC emissions are less than 25 tpy. The facility is minor for PM_{2.5} under NAA NSR because potential PM/PM₁₀ and sulfur dioxide (SO₂) emissions are below 100 tpy. The facility remains minor for SO₂ and PM_{2.5} under NAA NSR because of a fuel oil consumption limit [*Cond. 3.2.4*] for the boilers (BL01, BL04, and BL10), fuel specifications for the boilers [*Cond. 3.2.2*] and emergency generators [*Cond. 3.2.3 and 3.3.13*], and operational restrictions [*Cond. 3.2.1a and 3.4.6*] for the emergency generators.

The PSD major source threshold is 100 tpy because the boiler operations are one of the 28 listed source categories (as *fossil fuel boilers (or combination thereof) totaling more than 250 MMBtu/hr heat input*). The facility is major for carbon monoxide (CO) and greenhouse gases (GHGs) under PSD regulations because potential CO emissions exceed 100 tpy and potential GHG emissions exceed 100,000 tpy CO₂e.

Reasonably available control technology (RACT) for nitrogen oxides (NO_x)

The boilers (BL02, BL03, and BL04), and medical waste incinerator (INC3) are subject to the NO_x RACT requirements specified in Georgia Rule 391-3-1-.02(2)(yy)1. All emergency generators (CG01 through CG04 and CG07 through CG17) are subject to Georgia Rule 391-3-1-.02(2)(mmm) while the boilers (BL01 and BL10) are subject to Georgia Rule 391-3-1-.02(2)(lll) and according to Georgia Rule 391-3-1-.02(2)(yy)5., they are therefore not subject to Georgia Rule 391-3-1-.02(2)(yy). Potential NO_x emissions from incinerator INC1 is less than the 1 ton-per-year NO_x de minimis level specified in Georgia Rule 391-3-1-.02(2)(yy)4.; therefore, INC1 is not subject to the RACT requirement.

The facility submitted a NO_x RACT Plan dated November 5, 1998 for the boilers (BL02, BL03, and BL04), which found that NO_x RACT for boilers with a capacity between 15 and 100 million Btu per hour was annual tune-ups to achieve low excess air conditions [*Cond. 5.2.4*].

In a letter dated April 11, 2007, the facility proposed to use the NO_x emission limit (250 ppmv at 7 percent oxygen) in 40 CFR 60 Subpart Ec as a NO_x RACT limit for the hospital/medical/infectious waste incinerator (INC3). INC3 is now subject to a more stringent Federal Plan limit of 190 ppmv at 7 percent oxygen per 40 CFR 62 Subpart HHH which serves as a revised NO_x RACT limit in the permit [*Cond. 3.2.10, Table 1, Row 4*].

2. Title V Major Source Status by Pollutant

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM ₁₀	Yes			✓
PM _{2.5}	Yes			✓
SO ₂	Yes			✓
VOC	Yes			✓
NO _x	Yes	✓		
CO	Yes	✓		
TRS	No			
H ₂ S	No			
Individual HAP	Yes			✓
Total HAPs	Yes			✓
GHG	Yes	✓		

3. MACT Standards

The facility is considered an area source of hazardous air pollutants (HAPs) because potential HAP emissions remain below the HAP major source thresholds (10 tpy individual / 25 tpy combined) as long as the waste burned in incinerators INC1 and INC4 limits chlorine-containing plastics [Cond. 3.2.8] and emissions from incinerator INC3 meet the HAP limits in the Federal Plan [Cond. 3.2.10].

40 CFR 60 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The emergency generators (CG15 through CG17) are considered new stationary RICE under 40 CFR 63 Subpart ZZZZ because they were constructed after June 12, 2006. According to 40 CFR 63.6590(c), new emergency stationary RICE located at an area source for HAPs, meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII [Cond. 3.3.14].

All other emergency generators (CG01 through CG04, and CG07 through CG14) are exempt from 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR 63.6585(f)(3) as existing institutional emergency stationary RICE at an area source for HAP emissions.

40 CFR 63 Subpart JJJJJJ – National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers in Area Sources

The facility is considered an area source of HAP therefore the existing boilers (BL01, BL02, BL03, BL04, and BL10) could be subject to 40 CFR 63 Subpart JJJJJJ. The facility chooses to operate the boilers primarily on natural gas and to use distillate fuel oil only as a backup fuel (during period of gas curtailment, supply interruption, and periodic testing) [Cond. 3.2.2 and 3.2.5]. The boilers are therefore considered “gas-fired boilers” (as defined in 40 CFR 63.11237) exempt from 40 CFR 63 Subpart JJJJJJ per 40 CFR 63.11195(e).

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	n
Program Code 8 – Part 61 NESHAP	n
Program Code 9 - NSPS	y
Program Code M – Part 63 NESHAP	y
Program Code V – Title V	y

Regulatory Analysis**II. Facility Wide Requirements****A. Emission and Operating Caps:**

None applicable.

B. Applicable Rules and Regulations

None applicable.

C. Compliance Status

The facility is operating in compliance with their Air Quality Permit.

D. Operational Flexibility

None applicable.

E. Permit Conditions

None applicable.

III. Regulated Equipment Requirements

A. Brief Process Description

The CDC Roybal Campus is a research facility; therefore, the primary sources of air emissions from the facility are the boilers, which supply heat to the buildings and steam to the autoclaves used in research, and generators, which are used for emergency back-up power. Incinerators and research activities account for the remainder of the emissions.

B. Equipment List for the Process

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

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
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
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

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
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
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, <u>primary burners</u> : 0.6 MMBtu/hr firing NG <u>secondary burner</u> : 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

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
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.

C. Equipment & Rule Applicability

Emission and Operating Caps

To reduce NO_x and SO₂ emissions, the facility must operate the boilers (BL01, BL02, BL03, BL04, and BL10) and emergency generators (CG01 through CG04, and CG07 through CG17) in accordance with the following limitations:

NO _x	Operational Limitations	Equipment	Legal Authority
NAA NSR Avoidance Limits	10 tons (per 12-consecutive months) 6 tons (per 12-consecutive months) 15 tons (per 12-consecutive months) 9 tons (per 12-consecutive months) 6 tons (per 12-consecutive months) 165 hrs of operation (per 12-consecutive months)	BL01 and BL04 BL10 CG01 thru CG04 CG10 thru CG14 CG15 thru CG17 CG08 and CG09	NAA NSR Avoidance per GA Rule 391-3-1-.03(8)(c)13(ii)
HMIWI Limit	190 ppmv at 7 percent oxygen	INC3	40 CFR 62 Subpart HHH
NSPS Limit	9.2 g/HP-hr (each engine)	CG15 thru CG17	40 CFR 60 Subpart IIII
Rule (III) Limit	30 ppm @ 3% oxygen (dry basis) (each boiler)	BL01 and B10	391-3-1-.02(2)(III)1.
Work Practices	Annual tune-ups for NO _x before ozone season Only fire natural gas during ozone season	BL02 thru BL04 BL01 and B10	391-3-1-.02(2)(yy)1 391-3-1-.02(2)(III)1.

SO ₂	Operational Limitations	Equipment	Legal Authority
Fuel Use	957,000 gallons of distillate fuel oil (per 12-consecutive months)	BL01, BL04, and BL10	40 CFR 52.21 - Avoidance
HMIWI Limit	4.2 ppmv at 7 percent oxygen (of SO ₂)	INC3	40 CFR 62 Subpart HHH
Fuel Content	0.5 % sulfur by weight (fuel sulfur content) 0.5 % sulfur by weight (fuel sulfur content) 0.5 % sulfur by weight (fuel sulfur content) 15 ppm (fuel sulfur content)	BL01, BL04, and BL10 CG01 thru CG04 CG07 thru CG14 CG15 thru CG17	40 CFR 60 Subpart Dc 40 CFR 52.21 - Avoidance 40 CFR 52.21 - Avoidance 40 CFR 60 Subpart IIII
Work Practices	Only fire natural gas during ozone season	BL01 and B10	391-3-1-.02(2)(yy)1

Applicable Rules and Regulations

Hospital/Medical/Infectious Waste Incinerator (INC3)

GA Rule 391-3-1-.02(2)(iii) – Hospital/Medical/Infectious Waste Incinerators constructed on or before June 20, 1996 (GA Rule (iii)).

Incinerator INC3 is the only existing Hospital/Medical/Infectious Waste Incinerator (HMIWI). INC3 (installed in 2006) commenced construction, reconstruction or modification after June 20, 1996, so it is not subject to GA Rule (iii). Furthermore, INC3 is not covered under any State plan.

40 CFR 60 Subpart Ec – “Standards of Performance for New Stationary Sources: Hospital/Medical/Infectious Waste Incinerators”(NSPS Ec):

INC3 (installed in 2006) is an existing HMIWI that commenced construction after June 20, 1996 but no later than December 1, 2008, so it could have been subject to 40 CFR 60 Subpart Ec based on 40 CFR 60.50c(a)(1). It would be considered a small HMIWI defined as “a batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day” (40 CFR 60.51c), and would be subject to emission limits in Table 1A of 40 CFR 60 Subpart Ec. The limits from Table 1A were used in Condition 3.2.10 of Permit No. 9431-089-0005-V-02-0. A new Federal HMIWI Plan issued May 13, 2013 in 40 CFR 62 Subpart HHH applies to all HMIWI constructed on or before December 1, 2008 and subsumes all previous requirements and limits set for INC3.

40 CFR 62 Subpart HHH – “Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators constructed on or before December 1, 2008 (Federal Plan):

INC3 (installed in 2006) is now subject to the Federal Plan because (i) it is not covered under a State plan, (ii) its construction commenced on or before December 1, 2008, and (iii) it does not qualify for exemptions under 40 CFR 62.14400. INC3 is considered a small intermittent HMIWI as defined in 40 CFR 62.14490. The Table below offers a comparative summary of emission limits in NSPS Ec (40 CFR 60 Subpart Ec) used in Permit No. 9431-089-0005-V-02-0 and in the Federal Plan (40 CFR 62 Subpart HHH) used in this renewal permit:

Pollutant	NSPS Ec Limit*	Federal Plan Limit*	Last Test Results for INC 3	Last Test Date
Opacity	10 % per 40 CFR 60.52c(b)(1)	6 % per 40 CFR 62.14412(a)	0.4%	May 2, 2013
PM	0.03 gr/dscf	0.029 gr/dscf	0.019 gr/dscf	May 2, 2013
CO	40 ppmv	20 ppmv	7.4 ppmv	May 2, 2013
NO _x	250 ppmv	190 ppmv	-	-
SO ₂	55 ppmv	4.2 ppmv	-	-
Dioxin/Furans (CDD/CDF)	125 ng/dscm (total), or 2.3 ng/dscm (TEQ)	16 ng/dscm (total), or 0.013 ng/dscm (TEQ)	0.0045 ng/dscm (TEQ)	Jan 11, 2007
Hydrochloric acid (HCl)	15 ppmv, or 99% Reduction	15 ppmv	0.56 ppmv	May 2, 2013
Cadmium (Cd)	0.16 mg/dscm, or 65% Reduction	0.017 mg/dscm	0.00545 mg/dscm	Dec 7, 2006
Lead (Pb)	1.2 mg/dscm, or 70% Reduction	0.31 mg/dscm	0.07268 mg/dscm	Dec 7, 2006
Mercury (Hg)	0.55 mg/dscm, or 85% Reduction	0.014 mg/dscm	0.00292 mg/dscm	Dec 7, 2006

* All limits are based on 7% oxygen, dry basis.

40 CFR 62.13(c) states that, the substantive requirements of the hospital/medical/infectious waste incinerator Federal plan are contained in 40 CFR 62 Subpart HHH. These requirements include not only emission limits but compliance schedules, testing, monitoring and reporting, and recordkeeping requirements. The requirements largely mirror the requirements in 40 CFR 60 Subpart Ec.

The facility must have a fully trained and qualified HMIWI operator, either present at the facility or able to be at the facility within 1 hour per 40 CFR 62.14420 [*Cond. 3.2.18*]. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators. Requirements for training courses [*Cond. 3.3.4*], and operator qualifications [*Cond. 3.3.6*] are provided in 40 CFR 62.14422 and 40 CFR 14423 respectively.

All HMIWI must have a waste management plan [*Cond. 3.3.8*] that provides for the separation of solid waste (recyclable and non-recyclable) from health care waste to reduce the amount of toxic emissions from incinerated waste according to 40 CFR 62.14430.

40 CFR 62.14441(b) requires that the facility conduct annual inspections of the HMIWI equipment and its control devices as outlined in 40 CFR 62.14442 (no more than 12 months following the initial inspection or previous annual inspection). All necessary repairs must be completed within 10 operating days of the inspection unless written approval is granted by the EPA Administrator (or delegated enforcement authority) per 40 CFR 62.14443.

40 CFR 62.14451 states that the facility must conduct an initial performance test for PM, opacity, CO, dioxin/furan, HCl, Pb, Cd, Hg, SO₂, NO_x and fugitive ash emissions using the test methods and procedures outlined in 40 CFR 62.14452. After the initial performance test is completed or is required to be completed the facility must determine compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in 40 CFR 62.14470, then the facility determines compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in 40 CFR 62.14452 [*Cond. 4.2.4*]. If all three performance tests over a 3-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the facility may forego a performance test for that pollutant for the next 2 years. At a minimum, the facility must conduct a performance test for PM, CO, and HCl every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the facility may forego a performance test for that pollutant for an additional 2 years. If any performance test indicates noncompliance with the respective emission limit, the facility must conduct a performance test for that pollutant annually until all annual performance tests over a 3-year period indicate compliance with the emission limit [*Cond. 4.2.5*].

Pathological Waste Incinerators (INC1 and INC4)

HAP Major Source Avoidance - The facility indicated that non-hospital/medical/infectious (non-HMI) waste burned in the incinerators INC1 and INC4 do not include any chlorine-containing plastics except the plastic bags that wrap or bag the pathological waste [*Cond. 3.2.8*]. This limit ensures that the facility remains synthetic minor under Title V for HAPs. Since the facility is

synthetic minor for HAPs, incinerators INC1 and INC4 are not subject to any maximum available control technology (MACT) specified in 40 CFR 63 or case-by-case MACT required under Section 112(g).

Avoidance of Waste Incinerator Rules - Incinerator INC4, built in 2009, burns mostly pathological waste and the permit ensures that no more than 10% of the total waste burned, on a quarterly basis in INC4, is Hospital /Medical/ Infectious (HMI) waste. This restriction in the permit [Cond. 3.2.7a.], makes INC4 a pathological waste incinerator and a co-fired combustor not subject to the following NSPS regulations:

- *40 CFR 60 Subpart Ec - Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which construction is commenced after June 20, 1996* - exempt as a co-fired combustor under 40 CFR 60.50c(c).
- *40 CFR 60 Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for which construction is commenced after November 30, 1999 or for which modification or reconstruction is commenced on or after June 1, 2001* - exempt as a pathological waste incineration unit under 40 CFR 60.2020(a).
- *40 CFR 60 Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for which construction is commenced after December 9, 2004, or for which modification or reconstruction is commenced on or after June 16, 2006* - exempt as a pathological waste incineration unit under 40 CFR 60.2887(l).

GA Rule (iii) Avoidance - Incinerator INC1, built in 1988, also burns mostly pathological waste and the permit ensures that no more than 10% of the total waste burned, on a quarterly basis in INC1, is HMI waste. This restriction in the permit [Cond. 3.2.7a.], makes INC1 a co-fired combustor exempt from *GA Rule (iii) - Hospital/Medical/Infectious Waste Incinerators Constructed on or Before June 20, 1996* per exemption Rule 391-3-1-.02(2)(iii)1.(i).

GA Rule (c) - Incinerators - Incinerators INC1 and INC4 are subject to GA Rule 391-3-1-.02(2)(c) which sets an emission limit for fly ash and PM of 1.0 pound per hour in GA Rule 391-3-1-.02(2)(c)1(i) when the incinerator charging rate is 500 pounds per hour or less [Cond. 3.4.2.a]. Rule (c) also sets a visible emissions limit of less than 20% opacity (27% opacity or less for any 6-minute period per hour) [Cond. 3.4.2.b]. Each incinerator (INC1 or INC4) must not emit any particles, which are individually large enough to be visible to the unaided eye per Rule 391-3-1-.02(2)(c)3 [Cond. 3.4.2.c]. Each incinerator must be at least a dual chamber incinerator equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800°F [Cond. 3.2.7b.] and have a secondary burner to maintain a temperature of at least 1,500°F in the second chamber [Cond. 3.2.7c.] in accordance with Rule 391-3-1-.02(2)(c)4.

GA Rule (n) - Fugitive Dust - The facility must comply with Georgia Air Quality Rule 391-3-1-.02(2)(n) when handling ash from the incinerators (INC1, INC3, and INC4), including the 20% opacity limit [Cond. 3.4.7 and 3.4.8].

GA Rule (yy) - Emissions of NO_x from Major Sources - Since the facility is located in Dekalb County and the facility-wide NO_x emissions are potentially greater than 25 tpy, the facility is subject to Georgia Air Quality Rule 391-3-1-.02(2)(yy). Incinerator INC1 does not require the

application of Division approved reasonably available control technology (RACT) because potential emissions of NO_x from INC1 are less than the de minimus level of 1 ton-per-year defined in Rule 391-3-1-.02(2)(yy)4. Incinerator INC4 is subject to RACT requirements per Rule 391-3-1-.02(2)(yy)1. In 2009 (Application No. TV-18953), The Division approved RACT for INC4 to be no additional control based on a previously submitted NO_x RACT Plan (dated November 5, 1998) for an incinerator (INC2) of similar size that did not require RACT controls and based on the fact that actual emissions would not exceed the de minimis level of 1 tpy even if INC4 were to operate 3,000 hours per year.

Boilers BL01, BL02, BL03, BL04, and BL10

GA Rule (g) – Sulfur Dioxide – According to GA Rule 391-3-1-.02(2)(g)2., fuel burning sources below 100 MMBtu of heat input per hour cannot burn fuel containing more than 2.5% sulfur by weight. All boilers (BL01, BL02, BL03, BL04, and BL10) at the facility are subject to a more stringent fuel sulfur content limit of 0.5% [*Cond. 3.2.2 and 3.2.5*] that subsumes the Rule (g) limit.

GA Rule (d) – PM/Visible Emissions From Fuel-Burning Equipment:

- applies to boilers BL01, BL04, and BL10 considered fuel burning equipment constructed after January 1, 1972 with a heat input capacity between 10 MMBtu/hr and 250 MMBtu/hr. These newer boilers have to meet a PM emission limit [*Cond. 3.4.4*] found Rule (d)2.(ii) and a visible emissions limit of 20% opacity per Rule (d)3. [*Cond. 3.3.2*]
- applies to boilers BL02 and BL03 considered fuel burning equipment constructed on or before January 1, 1972 with a heat input capacity between 10 MMBtu/hr and 2,000 MMBtu/hr. These older boilers have to meet a PM emission limit [*Cond. 3.4.3*] found Rule (d)1.(ii) and default to a general visible emissions limit of 40% found in GA Rule 391-3-1-.02(2)(b)1. [*Cond. 3.4.1*]

GA Rule (III) – NO_x Emissions From Fuel-Burning Equipment - applies to boilers BL01 and BL10 because they are located in Dekalb County, have a heat input capacity between 10 MMBtu/hr and 250 MMBtu/hr, and were installed or modified on or after May 1, 1999. Rule (III) sets a NO_x emission limit of 30 ppm at 3% O₂ on a dry basis during the ozone season [*Cond. 3.4.5*]. The facility demonstrates compliance with the Rule (III) limit by continuously monitoring NO_x emissions using a Predictive Emissions Monitoring System (PEMS) that undergoes annual accuracy tests [*Cond. 5.2.3*].

40 CFR 60 Subpart Dc – New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units - applies to boilers BL01, BL04, and BL10 because they have a heat input capacity greater than 10 MMBtu/hr and less than or equal to 100 MMBtu/hr and will be constructed after June 9, 1989. Because the gas-fired boilers can still fire fuel oil as a backup, NSPS Dc sets a fuel sulfur content limit of 0.5% sulfur by weight per 40 CFR 60.42c(d). This sulfur content subsumes the limit of 2.5% sulfur by weight found in GA Rule 391-3-1-.02(2)(g)2 [*Cond. 3.2.2*]. Subpart Dc also provides PM and opacity emissions limits. The PM limit applies to units which combust coal, wood, or oil, however these boilers burn fuel oil with a sulfur content limit of 0.5% sulfur weight percent, therefore they are not

subject to the PM limit per 40 CFR 60.43c(e)(4). The boilers are also subject to visible emissions limit of 20% per 40 CFR 60.43c(c).

40 CFR 63 Subpart JJJJJJ (Boiler GACT) – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers in Area Sources - does not apply to the boilers because they are gas-fired boilers that only burn fuel oil during periods of gas curtailment; which allows them to qualify for an exemption under 40 CFR 63.11195(e) [Cond. 3.2.2 and 3.2.5].

40 CFR 63 Subpart DDDDDD (Boiler MACT) – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters in Major Sources – does not apply because the facility is not a major source of HAP [Cond. 3.2.8]

Engine Driven Generators CG01 through CG04 and CG07 through CG17

GA Rule (mmm) – NO_x Emissions From Stationary Gas Turbines and Stationary Engines used to Generate Electricity - emergency standby stationary engines are exempt from GA Rule (mmm) under Rule 391-3-1-.02(2)(mmm)7 as “emergency standby stationary engines” limited to 200 hrs of operation per year [Cond. 3.4.6]. Emergency engines CG08 and CG09 are subject to a more stringent annual operating limit for NAA NSR avoidance [Cond. 3.2.1.a.].

GA Rule (b) – Visible Emissions – According to GA Rule 391-3-1-.02(2)(b)1., the facility cannot emit visible emissions from its engines the opacity of which is equal to or greater than 40% [Cond. 3.4.1]. The emergency generators only fire No. 2 distillate fuel oil so they are expected to meet the GA Rule (b) standard [Cond. 3.2.3].

GA Rule (g) – Sulfur Dioxide – According to GA Rule 391-3-1-.02(2)(g)2., fuel burning sources below 100 MMBtu of heat input per hour cannot burn fuel containing more than 2.5% sulfur by weight. The emergency generators only fire No. 2 distillate fuel oil with a fuel sulfur content limit of 0.5%, so they are expected to meet the Rule (g) requirements [Cond. 3.2.3].

40 CFR 60 Subpart IIII (NSPS IIII) – NSPS for Stationary Compression Ignition Internal Combustion Engines - applies to emergency engines CG15 through CG17 because they were manufactured after April 1, 2006 [Cond. 3.3.9]. NSPS IIII limits non-emergency service time to 100 hours per year [Cond. 3.3.13] and requires engines to be certified or tested to meet the standards in 40 CFR 60.4205(l) [Cond. 3.3.10]. The performance standards that apply to emergency engines CG15 through CG17 are presented below:

Table 1 of NSPS Subpart IIII Emission Standards For Stationary Pre-2007 Model Year Diesel Engines With A Displacement Of Less Than 10 Liters Per Cylinder And 2007-2010 Model Year Engines Greater Than 2,237 kW (3,000 HP) and With a Displacement Of Less Than 10 Liters Per Cylinder.

ID No.	Emission Standards							
	grams per kilowatt-hour (g/KW-hr)				grams per horsepower-hour (g/Hp-hr)			
	NO _x	CO	PM	HC	NO _x	CO	PM	HC
CG15 thru CG17	9.2	14.4	0.54	1.3	6.9	8.5	0.40	1.0

According to 40 CFR 60.4207, the emergency generators can only burn distillate fuel oil that has a maximum sulfur content of 15 ppm (subsumes GA Rule (g) limit of 2.5% sulfur by weight) [Cond. 3.3.11].

40 CFR 63 Subpart ZZZZ (RICE MACT) – NESHAP for Stationary Reciprocating Internal Combustion Engines – applies to emergency engines CG15 through CG17 as stationary reciprocating internal combustion engines located at an area source of HAP. New RICE (CG15 through CG17) comply with the RICE MACT by complying with NSPS IIII. RICE MACT does not apply to existing RICE like CG01 through CG04 or CG07 through CG14 because CDC Roybal meets the definition of an institution located at an area source of HAP and according to 40 CFR 63.6585(f)(3), the following engines are not subject to RICE MACT:

“Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii)”.

HMIWI ash handling ASH1

Georgia Rule 391-3-1-.02(2)(n) Standard for Fugitive Dust:

This regulation requires Centers for Disease Control and Prevention - Roybal to take all reasonable precautions to prevent such dust from becoming airborne for any operation, process, handling, transportation or storage facility which may result in fugitive dust. This regulation also limits opacity from such sources to less than 20 percent.

This limit applies to wood storage piles, conveyors and wood handling systems, and bottom and fly ash handling system.

D. Compliance Status

The facility is operating in compliance with their Air Quality Permit.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Equipment Emission Caps and Operating Limits

Boilers and Emergency Generators

Modified Conditions 3.2.1 b. and c., 3.2.3, 3.2.4, 3.2.5, 3.2.6 reflect the change in Source Codes from “CG03 through CG06” to “CG01 through CG04” for four generators, and from “BL07” to “BL01” for one boiler.

Modified Condition 3.2.2 a. and b. reflects the change in Source Code from “BL07” to “BL01” for one boiler and the removal of boilers BL08 and BL09 from the facility and the permit.

No other changes were made to Conditions 3.2.1 through 3.2.6

Incinerators INC1 and INC4

Modified Condition 3.2.7 clarifies through its citation that 40 CFR 60 Subparts Ec, CCCC, and EEEE are avoided by setting a limit for hospital/medical/infectious waste of no more than 10% of the total waste burned in incinerators INC1 and INC4. Incinerator INC4 replaces the old incinerator INC2, now removed from the facility.

Modified Condition 3.2.8 references incinerator INC4 instead of INC2, no longer at the facility.

No other changes were made to Conditions 3.2.7 and 3.2.8.

Incinerator INC3

Modified Condition 3.2.10 according to the limits found in Table 1 of 40 CFR 62 Subpart HHH which are more stringent than the previous limits found in 40 CFR 60 Subpart Ec.

All modified Conditions 3.2.11 through 3.2.23 reference 40 CFR 62 Subpart HHH instead of 40 CFR 60 Subpart Ec but are not substantively different from the facilities current permit.

New Condition 3.2.24 specifies the waste types that can be burned in INC3 including contraband such as drugs and narcotics destroyed at the request of authorized local, state, and federal government agencies.

No other changes were made to Conditions 3.2.9 through 3.2.24.

Equipment Federal Rule Standards**Boilers BL01, BL04, BL10**

Modified Conditions 3.3.1 and 3.3.2 reflect the change in Source Code from “BL07” to “BL01” for one boiler. No other changes were made to Conditions 3.3.1 and 3.3.2.

Incinerator INC3

Modified Condition 3.3.3 states that INC3 is now subject to 40 CFR 62 Subpart HHH instead of 40 CFR 60 Subpart Ec.

Modified Condition 3.3.5 states that to be a qualified operator of the HMIWI INC3, the operator must complete the training (which includes a test) and have the necessary experience per 40 CFR 62.14423(a) and (b). Unlike old permit Condition 3.3.6 which states that you can pass the exam or have the necessary experience, modified Condition 3.3.5 requires the completion of both the training and the experience as required by 40 CFR 62.14423(a) and (b) and incorporates information from both old Condition 3.3.5 and old Condition 3.3.6.

All Conditions 3.3.3 through 3.3.8 were modified to reference 40 CFR 62 Subpart HHH instead of 40 CFR 60 Subpart Ec.

Emergency Generators

New Condition 3.3.11 replaces old condition 3.3.13 and old condition 3.3.12 was removed because it applied to engines (CG15 through CG17) before October 1, 2010 therefore it is no longer valid or needed.

New Condition 3.3.14 replaces old condition 3.3.16 and states now that only emergency generators (CG15 through CG17) are subject to 40 CFR 63 Subpart ZZZZ. They comply with Subpart ZZZZ by complying with 40 CFR 60 Subpart IIII.

All new Conditions 3.3.9 through 3.3.14 replace old Conditions 3.3.10 through 3.3.16.

Equipment SIP Rule Standards

Modified Conditions 3.4.1 through 3.4.8 replace old Conditions 3.4.1 through 3.4.9 and reflect the change in Source Codes from “CG03 through CG06” to “CG01 through CG04” for four generators, from “BL07” to “BL01” for one boiler, the removal of boilers BL08 and BL09 from the facility and the permit, and the replacement of INC2 with INC4.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

1. Individual Equipment

Incinerator INC3

Modified Condition 4.2.3 no longer references initial testing conducted in December 2006 and January 2007.

Modified Condition 4.2.17 reflects modified equation coefficients found in Table 2 of 40 CFR 62 Subpart HHH. These numbers differ from those found in the previous permits and taken from Table 2 of 40 CFR 60 Subpart Ec. Differences between the toxic equivalency factors in NSPS Ec and the Federal Plan are presented below:

Dioxin/furan congener	NSPS Ec Limit*	Federal Plan Limit*
2,3,7,8-TCDD	1	1
1,2,3,7,8-PCDD	0.5	1
1,2,3,4,7,8-HxCDD	0.1	0.1
1,2,3,7,8,9-HxCDD	0.1	0.1
1,2,3,6,7,8-HxCDD	0.1	0.1
1,2,3,4, 6,7,8-HpCDD	0.01	0.01
OctaCDD	0.001	0.0003
2,3,7,8-TCDF	0.1	0.1
1,2,3,7,8-PCDF	0.05	0.03
2,3,4,7,8-PCDF	0.5	0.3
1,2,3,4,7,8-HxCDF	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1
1,2,3,4,6x,7,8-HpCDF	0.01	0.01
1,2,3,4,7,8,9- HpCDF	0.01	0.01
OctaDCF	0.001	0.0003

All Conditions 4.2.1 through 4.2.17 were modified to reference 40 CFR 62 Subpart HHH instead of 40 CFR 60 Subpart Ec.

2. Equipment Groups (all subject to the same test requirements): None applicable.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)**A. General Monitoring Requirements**

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements**1. Individual Equipment:**

Modified Conditions 5.2.1 through 5.2.6 reflect the change in Source Codes from “CG03 through CG06” to “CG01 through CG04” for four generators, from “BL07” to “BL01” for one boiler, and the replacement of INC2 with INC4.

Modified Conditions 5.2.7 through 5.2.10 reference 40 CFR 62 Subpart HHH instead of 40 CFR 60 Subpart Ec.

No other changes were made to Conditions 5.2.1 through 5.2.10.

2. Equipment Groups (all subject to the same monitoring requirements):

None applicable.

C. Compliance Assurance Monitoring (CAM)

The facility has no emission unit equipped with an emission unit control device. Therefore, the facility is not subject to CAM.

VI. Other Record Keeping and Reporting Requirements**A. General Record Keeping and Reporting Requirements**

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

Template Conditions 6.1.3 and 6.1.4 were updated in September 2011 to allow ~60 days to submit periodic reports. Alternative reporting deadlines are allowed per 40 CFR 70.6, 40 CFR 60.19(f) and 40 CFR 63.10(a).

Modified Condition 6.1.7 reflects the change in Source Codes from “CG03 through CG06” to “CG01 through CG04” for four generators, from “BL07” to “BL01” for one boiler, and the replacement of INC2 with INC4.

B. Specific Record Keeping and Reporting Requirements

Modified Conditions 6.2.1 through 6.2.28 replace old Conditions 6.2.1 through 6.2.29 and reflect the change in Source Codes from “CG03 through CG06” to “CG01 through CG04” for four generators, from “BL07” to “BL01” for one boiler, the removal of boilers BL08 and BL09 from the facility and the permit, and the replacement of INC2 with INC4. Old condition 6.2.10 was removed because it applied to engines (CG15 through CG17) before October 1, 2010 therefore it is no longer valid or needed.

VII. Specific Requirements

A. Operational Flexibility

Other than the standard conditions (7.1.1, 7.2.1, and 7.2.2), operational flexibility provisions have not been incorporated into this Title V Permit. The applicant did not include any alternative operating scenarios in their Title V Application or request any specific operational flexibility conditions.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into the Title V Permit.

C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

D. Temporary Sources

The facility did not apply for a permit for any temporary sources.

E. Short-Term Activities

No short-term activities were identified for this facility.

F. Compliance Schedule/Progress Reports

The facility is in compliance with all Air Quality Regulations. Therefore, no compliance schedule or progress reports are necessary.

G. Emissions Trading

The facility is not involved in any emissions trading programs.

H. Acid Rain Requirements

None applicable.

I. Stratospheric Ozone Protection Requirements

The facility is subject to the Stratospheric Ozone Protection Requirements under Title VI of the CAAA of 1990. The facility has stated in their application that they are potentially subject to 40 CFR, Part 82, Subpart E - The Labeling of Products Using Ozone Depleting Substances, and Subpart F- Recycling and Emission Reduction.

J. Pollution Prevention

There is no pollution prevention requirements in this Title V permit.

K. Specific Conditions

None applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.