

Facility Name: **Centers for Disease Control and Prevention - Roybal**  
City: Atlanta  
County: Dekalb  
AIRS #: 04-13-08900005

Application #: TV- 462936  
Date Application Received: February 20, 2020  
Permit No: 9431-089-0005-V-04-0

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## Introduction

This narrative is being provided to assist the reader in understanding the content of referenced 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. The 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 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  
Centers for Disease Control

4. Facility Location

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

5. Attainment, Non-attainment Area Location, or Contributing Area

This facility is located in Dekalb County, a non-attainment area for ozone (NO<sub>x</sub> and VOC are regulated precursors).

### 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, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
9431-089-0005-V-04-0	8/12/2015	Title V Renewal

## 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 (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<sup>1</sup> laboratories. 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 at 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-NOX 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.

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<sup>1</sup> 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 (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 and an Area Source 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.

#### 4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

### E. Regulatory Status

#### 1. PSD/NSR

CDC Roybal is located in Dekalb County, a non-attainment area for ozone of which NO<sub>x</sub> and VOC are precursors.

CDC Roybal is a PSD major source with a major source threshold of 100 tpy. 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) under PSD regulations because potential CO emissions exceed 100 tpy.

On June 18, 2018, Rules 391-3-1.03(8)(c)14 was revised so that the major source threshold for NO<sub>x</sub> and VOC for Title V and NAA-NSR was raised from 25 tpy to 100 tpy in the 15 counties including Dekalb County. The facility is major for NO<sub>x</sub> under NAA-NSR because potential NO<sub>x</sub> emissions exceed 100 tpy.

Previously, emissions caps and operational restrictions were added over the years to avoid the old rescinded NAA NSR threshold by making sure net emissions increases of NO<sub>x</sub> associated with each new project did not exceed 25 tons when aggregated over any period of 5 consecutive calendar years per the now repealed GA Rule 391-3-1-.03(8)(c)13(ii). Now, under GA Rule 391-3-1-.03(8)(c)14(i), any physical change in or change in the method of operation of a major stationary source that results in a net emission increase of volatile organic compounds or nitrogen oxide equal to or exceeding 40 tons per year of such air pollutant shall be considered a modification when determining the applicability of the permit requirements established by this subsection. CDC did not request any revision to the existing limitations. Existing NAA NSR avoidance NO<sub>x</sub> emissions caps and operational restrictions:

ID No.	Year	Work Practices		NOx 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)	<b>391-3-1-.03(8)(c)14(i)</b> 391-3-1-.02(2)(mmm)7.	- < 15 tpy	- <b>391-3-1-.03(8)(c)14(i)</b>
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 <sub>2</sub>	<b>391-3-1-.03(8)(c)14(i)</b> 391-3-1-.03(2)(lll)1 [BL01]
BL10	2004	Nat. Gas (Dist.Oil Backup) Nat. Gas Only (May-Sept)	40 CFR 63.11195(e) 391-3-1-.03(2)(lll)	< 6 tpy 30 ppm@3% O <sub>2</sub>	<b>391-3-1-.03(8)(c)14(i)</b> 391-3-1-.03(2)(lll)1
CG10 – CG11 CG12 – CG14	2004 2005	200 hours/year (each)	391-3-1-.02(2)(mmm)7.	< 9 tpy	<b>391-3-1-.03(8)(c)14(i)</b>
INC3*	2006	250 ppmv @ 7% O <sub>2</sub>	391-3-1-.02(2)(yy)1 (RACT based on NSPS Ec)	190 ppmv @ 7% O <sub>2</sub>	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	<b>391-3-1-.03(8)(c)14(i)</b> 40 CFR 60 Subpart IIII
INC4	2009	-	-	-	-

\*INC3 is 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. Once EPA approves Georgia's State Plan, INC3 will be subject to Rule 391-3-1-.02(2)(iii) in replacement of HHH.

For the boilers (BL01, BL04, and BL10) and emergency generators (CG01 through CG04 and CG08 through CG17), the permit contains NOx emissions limits [Cond. 3.2.1].

For the hospital/medical/infectious waste incinerator (INC3), the 391-3-1-.03(8)(c)14 limits (old NAA/NSR avoidance limits) were based on a NO<sub>x</sub> RACT limit set as equivalent to the emission standard (of 250 ppmv @ 7 percent oxygen) in 40 CFR 60 Subpart Ec. INC3 is now subject to a more stringent Federal Plan limit of 190 ppmv @ 7 percent oxygen per 40 CFR 62 Subpart HHH [Cond. 3.2.10, Table 1, Row 4]. INC3 will become subject to Rule 391-3-1-.02(2)(iii) (same emission standards as Subpart HHH) once it has been approved by EPA to replace the federal plan. All previously established NAA NSR avoidance caps remain in place even as the facility has removed two boilers (BL08 and BL09) and has adopted the more stringent Federal Plan limits for INC3.

The facility is minor for VOC because potential VOC emissions are less than 100 tpy. The facility is minor for PM<sub>2.5</sub> under because potential PM/PM<sub>10</sub> and sulfur dioxide (SO<sub>2</sub>) emissions are below 100 tpy. The facility remains minor for SO<sub>2</sub> and PM<sub>2.5</sub> 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 3.3.11], and operational restrictions [Cond. 3.2.1a, 3.3.13, and 3.4.6] for the emergency generators.

## 2. Title V Major Source Status by Pollutant

Table 2: 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 <sub>10</sub>	yes			✓
PM <sub>2.5</sub>	yes			✓
SO <sub>2</sub>	yes			✓
VOC	yes			✓
NO <sub>x</sub>	yes	✓		
CO	yes	✓		
TRS	n/a			
H <sub>2</sub> S	n/a			
Individual HAP	yes			✓
Total HAPs	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 and 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 JJJJJ per 40 CFR 63.11195(e).

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

## Regulatory Analysis

### II. Facility Wide Requirements

#### A. Emission and Operating Caps:

None applicable.

#### B. Applicable Rules and Regulations

##### **GA Rule (yy) - Emissions of NO<sub>x</sub> from Major Sources**

Since the facility is located in DeKalb County and the facility-wide NO<sub>x</sub> emissions are potentially greater than 25 tpy, the facility is subject to GA Rule 391-3-1-.02(2)(yy) which requires reasonably available control technology (RACT) for nitrogen oxides (NO<sub>x</sub>). These requirements are contained in the equipment specific section of the permit.

The boilers (BL02, BL03, and BL04), and medical waste incinerator (INC3) are subject to the NO<sub>x</sub> 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<sub>x</sub> emissions from incinerator INC1 is less than the 1 tpy de minimis level specified in Rule 391-3-1-.02(2)(yy)4; therefore, INC1 is not subject to the RACT requirement.

The facility submitted a NO<sub>x</sub> RACT Plan dated November 5, 1998 for the boilers (BL02, BL03, and BL04), which found that NO<sub>x</sub> RACT for boilers with a capacity between 15 and 100 MMBtu/hr. was annual tune-ups to achieve low excess air conditions [*Cond. 5.2.4*].

The potential NO<sub>x</sub> emissions from INC4 are small and the actual NO<sub>x</sub> emissions may be less than the de minimis level of 1 tpy; any additional control for NO<sub>x</sub> emissions from INC4 would not be cost effective. NO<sub>x</sub> RACT for INC4 is no additional control.

In a letter dated April 11, 2007, the facility proposed to use the NO<sub>x</sub> emission limit 250 ppmv @ 7% oxygen in 40 CFR 60 Subpart Ec as NO<sub>x</sub> RACT for the HMIWI (INC3). INC3 is now subject to a more stringent Federal Plan limit of 190 ppmv @ 7 percent oxygen per 40 CFR 62 Subpart HHH which serves as a revised NO<sub>x</sub> RACT limit in the permit [*Cond. 3.2.10, Table 1, Row 4*].

#### C. Compliance Status

The facility has not included any issues of noncompliance within the application.

#### D. Permit Conditions

None applicable.



### III. Regulated Equipment Requirements

#### A. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
BL01	Babcock and Wilcox Water Tube Boiler field erected in 2001 in Building #10 Low NO <sub>x</sub> 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)	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.	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.	None	None
BL04	Babcock and Wilcox Water Tube Boiler Model 650-DAF24 field erected in 1965 in Building #10. Low NO <sub>x</sub> burners and FGR 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.	None	None
BL10	Babcock and Wilcox Water Tube Boiler Model 201-3356/103-88M field erected in 2002 in Building #14. Low NO <sub>x</sub> 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)	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)	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)	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)	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)	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)	None	None

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
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)	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)	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)	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)	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)	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)	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)	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)	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)	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)	None	None

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
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)	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	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	None	None
ASH1	HMIWI ash handling	Rule 391-3-1-.02(2)(n)	None	None

## B. Equipment & Rule Applicability

### Emission and Operating Caps

To reduce NO<sub>x</sub> and SO<sub>2</sub> 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 <sub>x</sub>	Operational Limitations	Equipment	Legal Authority
Additional Provisions for Ozone Non-Attainment Areas	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	GA Rule 391-3-1-.03(8)(c)14
HMIWI Limit	190 ppmv at 7 percent oxygen	INC3	391-3-1-.02(2)(yy) 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 <sub>x</sub> 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 <sub>2</sub>	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 (SO <sub>2</sub> )	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

A State plan for existing HMIWI units [Rule 391-3-1-.02(2) (iii)] was submitted to the US EPA on December 19, 2018 but has not been approved by EPA. Without an EPA approved state plan, the facility must comply with 40 CFR 62 Subpart HHH – “Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators constructed on or before December 1, 2008.

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.

The provisions of this subparagraph apply to each HMIWI that commenced construction no later than December 1, 2008 or commenced modification no later than April 6, 2010 (hereinafter referred to as an “Existing HMIWI”). INC3 is classified as an “existing HMIWI”.

**Georgia Rule (iii)4** states, “*For the purposes of implementing the requirements and provisions of the Emission Guidelines of 40 CFR 60, Subpart Ce for Existing HMIWIs, each Existing HMIWI shall comply with the standards, requirements and provisions of 40 CFR Part 60, Subpart Ec, as amended on April 4, 2011, which is hereby incorporated and adopted by reference, with the exceptions as follows:*” which outlines all applicable emission standards, operating requirements, testing, monitoring, reporting and recordkeeping requirements as well as all applicable provisions.

**Georgia Rule (iii)4(ii)(I)II** states, “*From an affected facility constructed after June 20, 1996 but no later than December 1, 2008 no owner or operator of an Existing HMIWI shall cause to be discharged into the atmosphere from that affected facility any gases that contain stack emissions in excess of the applicable limits found in the more stringent of the requirements listed in Table 1B of 40 CFR Subpart Ce and Table 1A of 40 CFR Part 60, Subpart Ec.*”

**Georgia Rule (iii)5** states “*In keeping with subparagraph (iii)4., owners and operators of existing HMIWI units must comply with Georgia's state plan for existing HMIWI units, which is required by 40 CFR Part 60, Subpart Ce. The owner operator of each existing HMIWI unit shall comply with the requirements of 391-3-1-.02(2)(iii)4. upon approval of Georgia's state plan for existing HMIWI units by EPA.*”

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, therefore, it is potentially subject to 40 CFR 60 Subpart Ec based on 40 CFR 60.50c(a)(1). It is classified as a small HMIWI which is 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. However, 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 it is not covered under a State plan (has not been approved by EPA), its construction commenced on or before December 1, 2008, and 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 used in Permit No. 9431-089-0005-V-02-0 and in the Federal Plan {40 CFR 62 Subpart HHH [same emission limits as in Georgia Rule (iii)]} 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%	May 24, 2018
PM	0.03 gr/dscf	0.029 gr/dscf	0.003 gr/dscf	June 19, 2019
CO	40 ppmv	20 ppmv	1.3 ppmv	June 19, 2019
NO <sub>x</sub>	250 ppmv	190 ppmv	38.9	Sept 6, 2018
SO <sub>2</sub>	55 ppmv	4.2 ppmv	0.1	Sept 6, 2018
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	0.09 ppmv	June 19, 2019
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 HMIWI 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 62.14423 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, SO<sub>2</sub>, NO<sub>x</sub> 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 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<sub>x</sub> from Major Sources** - Since the facility is located in DeKalb County and the facility-wide NO<sub>x</sub> 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<sub>x</sub> 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, the Division approved RACT for INC4 to be no additional control based on a previously submitted NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> emission limit of 30 ppm at 3% O<sub>2</sub> 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<sub>x</sub> 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 were 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) and testing and monitoring of opacity if they burn fuel oil.

**40 CFR 63 Subpart JJJJJ (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 DDDDD (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<sub>x</sub> Emissions From Stationary Gas Turbines and Stationary Engines used to Generate Electricity** - emergency standby stationary engines are exempt from the emission standards of 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 [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 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 <sub>x</sub>	CO	PM	HC	NO <sub>x</sub>	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 with maximum sulfur content of 15 ppm (subsumes Rule (g) 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 CG01 through CG04 or CG07 through CG14 because CDC Roybal meets the definition of an institution and an area source of HAP. 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.

**C. Permit Conditions****Modified Conditions:**

Condition 3.3.3 was modified to include applicability to Georgia Rule 391-3-1-.02(2)(iii) once approved by EPA.

Condition 3.3.11 was reworded to match current language for NSPS IIII fuel oil requirements.

Condition 3.3.12 was reworded to match current language for NSPS IIII for operating and maintaining engines and controls.

Other conditions were modified to update citation to include 391-3-1-.02(2)(iii) when 40 CFR 62 Subpart HHH is cited. Conditions were modified to update citation to include 391-3-1-.03(8)(c)14 when rescinded 391-3-1-.03(8)(c)13 was cited.

Permit Condition 3.2.1 requires the Permittee to comply with operating caps and nitrogen oxides (NO<sub>x</sub>) emission limits under the Additional Provisions for Ozone Non-Attainment Areas. (Citation chaged)

Permit Condition 3.2.2 prohibits the Permittee to fire any fuel other than natural gas in boilers BL01, BL04, and BL10. Condition reworded for clarification.

Permit Condition 3.2.3 prohibits the Permittee to fire any fuel other than distillate fuel in engines CG01 through CG04 and CG07 through CG14.

Permit Condition 3.2.4 prohibits the Permittee from burning 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 to avoid PSD.

Permit Condition 3.2.5 prohibits the Permittee from firing any fuel other than natural gas or distillate fuel oils, in the boilers (Source Codes: BL02 and BL03).

Permit Condition 3.2.6 requires the Permittee to comply with Georgia Rule (III).

Permit Condition 3.2.7 outlines the parameters and operational limitations for incinerators INC1 and INC4 for avoidance under Georgia Rule (iii) and NSPS Subpart Ec.

Permit Condition 3.2.8 requires the Permittee to ensure that non-hospital/medical/infectious (non-HMI) waste burned in the incinerators does not include any chlorine-containing plastics except the plastic bags that wrap or bag the pathological waste.

Permit Condition 3.2.9 requires the Permittee to operate the scrubber with ID No. RDA1 at all times that the hospital/medical/infectious waste incinerator (HMIWI) with ID No. INC3 is in operation

Permit Condition 3.2.10 prohibits the Permittee from discharging or cause the discharge into the atmosphere from the stack of the HMIWI with ID No. INC3 the pollutants in excess of the amounts listed in Table 1 of 40 CFR 62 Subpart HHH and 391-3-1-.02(2)(iii). Table revised to show the only compliance option. (Citations updated)

Permit Condition 3.2.11 requires the Permittee to comply with the limits at all time, except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the HMIWI during startup, shutdown, or malfunction. (Citation updated)

Permit Condition 3.2.12 prohibits the Permittee to operate outside the parameter limits established in 40 CFR 62.14453(a)(2) and Table 3 of Federal Plan Subpart HHH, measured as three-hour rolling averages. (Citation updated)

Permit Condition 3.2.13 outlines the 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. (Citations updated)

Permit Condition 3.2.14 prohibits the Permittee from opening the by-pass stack isolation damper during incinerator operation. (Citation updated)

Permit Condition 3.2.15 requires the Permittee to only charge waste to the HMIWI with ID No. INC3 during normal operations. (Citation updated)

Permit Condition 3.2.16 prohibits the Permittee from placing the HMIWI with ID No. INC3 into shutdown mode, following normal operations of the incinerator, until all waste has been combusted. (Citation updated)

Permit Condition 3.2.17 requires that during periods of malfunction of the HMIWI, 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. (Citation updated)

Permit Condition 3.2.18 prohibits the Permittee to operate the HMIWI with ID No. INC3 unless a qualified HMIWI operator, per Condition 3.3.4, is at the facility or is available within one hour. (Citation updated)

Permit Condition 3.2.19 prohibits the Permittee from operating the HMIWI with ID No. 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.) (Citation updated)

Permit Condition 3.2.20 requires the Permittee to 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. (Citation updated)

Permit Condition 3.2.21 requires the Permittee to 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. (Citation updated)

Permit Condition 3.2.22 requires the Permittee to assure there is water flow to Demister #1 and to the atomizer disc at all times during incinerator operation. (Citation updated)

Permit Condition 3.2.23 requires the Permittee to 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 with ID No. INC3 is in operation. (Citation updated)

Permit Condition 3.2.24 outlines the acceptable waste types that can be incinerated in the incinerator. (Citation updated)

Permit Condition 3.3.1 requires the Permittee to comply with the applicable provisions of 40 CFR Part 60 Subparts A and Dc for boilers BL01, BL04, and BL10.

Permit Condition 3.3.2 limits opacity for boilers BL01, BL04, and BL10 under NSPS Subpart Dc and Georgia Rule (d).

Permit Condition 3.3.3 requires the Permittee to comply with all applicable provisions of 40 CFR 62 Subpart A and Subpart HHH for the operation of the HMIWI with ID No. INC3 until 391-3-1-.02(2)(iii) is approved by EPA.

Permit Conditions 3.3.4 through 3.3.7 outline the requirements for the Permittee to develop and implement a documented training program to ensure that qualified HMIWI operators are available to operate the HMIWI with ID No. INC3, in accordance with Condition 3.2.18. (Citations updated)

Permit Condition 3.3.8 requires the Permittee to prepare and maintain a waste management plan (WMP) of any waste fired in the HMIWI with ID No. INC3. (Citation updated)

Permit Condition 3.3.9 through 3.3.13 outlines the requirements and provisions the Permittee is to comply with under NSPS Subparts A and IIII for generators CG15 through CG17.

Permit Condition 3.3.14 requires the Permittee to comply with applicable provisions of 40 CFR Part 63, Subpart A and Subpart ZZZZ.

Permit Condition 3.4.1 limits opacity from the diesel engine driven generators and boilers BL02 and BL03 under Georgia Rule (b).

Permit Condition 3.4.2 limits opacity, particles and particulate matter from incinerators INC1 and INC4.

Permit Conditions 3.4.3 and 3.4.4 limit particulate emissions from the boilers under Georgia Rule (d).

Permit Condition 3.4.5 requires the Permittee to comply with applicable provisions of Georgia Rule (III) for boilers BL01 and BL10.

Permit Condition 3.4.6 limits the hours of operation for each diesel engine driven generator (Source Codes: CG01 through CG04 and CG07 through CG17) to less than 200 hours during any 12-months period in order to meet the definition of emergency standby generator under Georgia Rule (mmm).

Permit Conditions 3.4.7 and 3.4.8 outline the requirements under Georgia Rule (n) for fugitive emissions control.

Permit Condition 3.5.1 is a general condition that requires routine maintenance on all air pollution control equipment.

Permit Condition 3.5.2 is a general condition that requires spare parts/consumables inventory for control and monitoring equipment.

#### **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 Part 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**

###### Modified Conditions:

Condition 4.2.3 was modified to include reference to the initial tests done December 7 and 8, 2006, and January 11, 2007 on HMIWI INC3 to ensure the waste stream has not changed since initial testing. If the waste stream changes, new testing will be required.

New Condition 4.2.18 was added to require opacity testing on the boilers (Source Codes: BL01, BL04, and BL10) after first firing on fuel oil for NSPS Dc. This condition was omitted from past permits.

Permit Condition 4.2.1 requires the Permittee to install, calibrate and operate all required monitoring systems and devices, and the Data Acquisition System/Data Management System (DAS/DMS) installed per Condition 5.2.7 and the DAS/DMS must be fully implemented when performance tests are conducted.

Permit Conditions 4.2.2 through 4.2.6 outlines all of the testing and monitoring requirements associated with the DAS/DMS.

Permit Condition 4.2.7 requires the Permittee to calculate the following values to determine the parametric operating limits for normal operation of the HMIWI with ID No. INC3. (Citation updated)

Permit Conditions 4.2.8 through 4.2.17 list the performance testing and monitoring requirements the Permittee must comply with under 40 CFR 62 Subpart HHH for the HMIWI with ID No. INC3. Condition 4.2.13 citation updated.

New Permit Condition 4.2.18 was added to require opacity testing on the boilers (Source Codes: BL01, BL04, and BL10) after first firing on fuel oil for NSPS Dc.

## **V. Monitoring Requirements**

### **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**

#### Modified Conditions:

Citation changes have been made to replace the rescinded 391-3-1-.03(8)(c)13 with the 25 tpy/5 year threshold with the revised 391-3-1-.03(c)14 for 40 tpy modification threshold for NO<sub>x</sub> and VOC.

New Conditions 5.2.11, 5.2.12 and 5.2.13 were added to monitor opacity from the boilers (Source Codes: BL01, BL04, and BL10) after first firing on fuel oil for NSPS Dc. These conditions were omitted from previous permits.

Permit Condition 5.2.1 requires the Permittee to install, calibrate, maintain, and operate monitoring devices for the measurement of natural gas consumption, fuel oil consumption, a non-resettable hour meter for non-resettable hour meter to measure and record the number of hours operated for each diesel engine driven generator.

Permit Condition 5.2.2 requires the Permittee to install, calibrate, maintain, and operate a Predictive Emissions Monitoring System (PEMS), which continuously monitors boiler operating parameters and predicts NO<sub>x</sub> emission rates from the boiler with ID No. BL04 while firing natural gas and while firing No. 2 fuel oil. (Citation updated)

Permit Condition 5.2.3 requires the Permittee to install, calibrate, maintain, and operate a Predictive Emissions Monitoring System (PEMS), which continuously monitors boiler operating parameters and predicts NO<sub>x</sub> emission rates from the boilers with ID Nos. BL07 and BL10 while firing natural gas and while firing No. 2 fuel oil. (Citation updated)

Permit Condition 5.2.4 requires the Permittee to perform an annual tune-up on the boilers (Source Codes: BL02, BL03, and BL04) to comply with Georgia Rule (yy).

Permit Condition 5.2.5 requires the Permittee to install, calibrate, maintain, and operate devices to continuously monitor and record the primary and secondary chamber outlet temperature.

Permit Condition 5.2.6 requires the Permittee to install, calibrate, maintain, and operate monitoring devices for the measurement of the weight of the waste going into the incinerator.

Permit Condition 5.2.7 through 5.2.9 outline the requirements for the Permittee to follow when installing, calibrating and maintaining a data acquisition system (DAS) or data management system (DMS) to service the HMIWI and its associated scrubber. (Citation updated)

Permit Condition 5.2.10 outlines the parameters the Permittee must monitor on devices for the measurement of the indicated parameters on the incinerator INC3 and the associated scrubber.

New Conditions 5.2.11, 5.2.12 and 5.2.13 were added to monitor opacity from the boilers (Source Codes: BL01, BL04, and BL10) after first firing on fuel oil according to NSPS Dc.

C. Compliance Assurance Monitoring (CAM)

Not Applicable

**VI. 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.

B. Specific Record Keeping and Reporting Requirements

Modified Conditions:

Citation changes have been made to replace the rescinded 391-3-1-.03(8)(c)13 with the 25 tpy/5 year threshold with the revised 391-3-1-.03(c)14 for 40 tpy modification threshold for NOx and VOC.

Update citations

New Condition 6.2.29 was added for reporting of opacity monitoring as required by NSPS Dc. This condition was omitted from previous permits.



**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**

See Permit Application on GEOS website.  
See Attachment B of the permit

**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 did not identify any compliance issues or alternative compliance schedules in the application.

**G. Emissions Trading**

The facility is not involved in any emissions trading programs.

**H. Acid Rain Requirements**

Not 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 are no pollution prevention requirements in this Title V permit.

K. Specific Conditions

Not 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.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

**Addendum to Narrative**

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//