Facility Name: **USAG Fort Gordon**
City: Fort Gordon
County: Richmond
AIRS #: 04-13-245-00021

Application #: TV-505340
Date Application Received: September 29, 2020
Permit No: 9711-245-0021-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: USAG Fort Gordon

2. Parent/Holding Company Name

United States Army

3. Previous and/or Other Name(s)

Previously known as US Army Signal Center and Fort Gordon

4. Facility Location

Fort Gordon is located in Richmond County. The nearest town to Fort Gordon is Augusta, Georgia. It borders Fort Gordon on the east side.

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

The facility is located in an attainment area for all criteria pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

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
9711-245-0021-V-03-0	April 8, 2016	Title V renewal.
Off-Permit	December 15, 2016	Replace three emergency generators at Back Hall Building 24701.
Off-Permit	December 15, 2016	Replace the emergency generators at Darling Hall Building 33270.
Off-Permit	December 15, 2016	Install and operate a temporary 2006 model year diesel generator at Eisenhower Army Medical Center hospital for about 5 months.
9711-245-0021-V-03-1	June 26, 2017	Installed a new diesel powered peaking generator (Caterpillar C175-16, 3,000 kW) at

		Building 310 (hospital). Generator equipped with selective catalytic reduction (SCR) and diesel oxidation catalyst (DOC) to control NOx and PM emissions.
Off-Permit	August 2, 2017	Replaced an emergency generator with a new more efficient generator.
Off-Permit	January 24, 2018	Converted existing diesel generator into emergency generator.
Off-Permit	May 11, 2018	Installed 60 kW emergency stationary natural gas fueled generator.
Off-Permit	May 11, 2018	Repainted a satellite dish.
Off-Permit	June 7, 2018	Replaced existing No. 2 fuel oil tanks at Building 310 with a 30,000 and a 40,000 -gallon aboveground No. 2 fuel oil storage fuel tank.
Off-Permit	March 11, 2020	Replaced old emergency backup generator with new 600kw natural gas emergency standby generator.
9711-245-0021-V-03-2	November 25, 2020	Name change.

D. Process Description

1. SIC Codes(s)

   9711

   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)

   Fort Gordon is a military installation with a primary mission of training and supporting signal soldiers. The facility does not produce hard good products on an ongoing basis, as would be generated in a manufacturing facility, but on occasion produces products to support specific missions of the Army.

3. Overall Facility Process Description

Fort Gordon is the home of the United States Army Cyber Command, United States Army Cyber Center of Excellence, United States Army Signal Corps and the United States Army Cyber Corps. The post is home to a multitude of active-duty tenant activities and other Commands and Partners. Also located on base is the Dwight D. Eisenhower Army Medical Center.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

Fort Gordon has the potential to emit nitrogen oxides (NOx), carbon monoxide (CO) and sulfur dioxide (SO_2) at a rate in excess of 100 tons per year. Since it is a 28 source category facility for having total fossil fuel fired boiler capacity greater than 250 MMBtu/hr, Fort Gordon is considered a major source under the pertinent PSD/NSR regulations and is subject to PSD/NSR review for modifications in which any pollutant increase is greater than the corresponding the significance level under PSD/NSR rules. Fort Gordon has avoided PSD/NSR review for facility modifications in the past by taking limits to keep emissions of VOC, NOx, and SO_2 below the significance level. These limits are stated in permit Conditions 3.2.1 through 3.2.8.

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_{10}	Yes	x		✓
$PM_{2.5}$	Yes			✓
SO_2	Yes	✓		
VOC	Yes			✓
NO_x	Yes	✓		
CO	Yes	✓		
TRS	n/a			
H_2S	n/a			
Individual HAP	Yes			✓
Total HAPs	Yes			✓

2. MACT Standards

The facility is an area source for hazardous air pollutants (HAP) and is subject to 40 CFR 63 Subpart ZZZZ - "Reciprocating Internal Combustion Engines."

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	Yes
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:

Current Title V Permit No. 9711-245-0021-V-03-0 includes a facility wide cap on usage of VOC and HAP containing coatings and adhesives used in "furniture manufacturing," so the facility qualifies as an incidental wood manufacturer and is therefore exempt from 40 CFR 63 Subpart JJ.

B. Applicable Rules and Regulations

The facility is subject to 40 CFR 61 Subpart M, the NESHAP for Asbestos, which is applicable facility wide. In particular the facility is subject to the "standard for demolition and renovation" found in 40 CFR 61.145 and the "standard for waste disposal for manufacturing, fabricating, demolition, renovation, and spraying operations" found in 40 CFR 61.150.

The facility is potentially subject to the Wood Furniture MACT, 40 CFR 63 Subpart JJ. The facility remains exempt from this regulation by qualifying as an "incidental wood manufacturer" under 40 CFR 63.801. To qualify for this exemption, the facility must demonstrate that they use less than or equal to 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or components. Condition 2.1.1 contains the 100-gallon limit.

C. Compliance Status

The facility has not indicated any non-compliance issues.

D. Permit Conditions

Permit conditions from existing Permit No. 9711-245-0021-V-03-0, are carried over into this permit without any changes, except to update the description and ID No. for the Wood Shop M002 to Woodworking Areas WW1, WW2, and WW3 as requested in the renewal application.

Condition 2.1.1 limits the amount of finishing material and adhesives used facility wide in the manufacture of wood furniture or wood products. The monthly usage limitation confirms that the facility qualifies as an "incidental wood furniture manufacturer", and therefore is exempt from the requirements under wood furniture MACT standard, 40 CFR 63 Subpart JJ.

Condition 2.2.1 subjects the facility to 40 CFR 61 Subpart M - "National Emission Standards for Asbestos," and applies to the demolition or removal of regulated asbestos-containing material (RACM) at the base.

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
B003 (Boiler Group 1)	Boiler located at Building 310/The Hospital Plant. 17 MMBtu/hr fire tube boiler fired with natural gas and having No. 2 fuel oil as backup fuel (Installed 1998)	Rule 391-3-1-.02(2)(d) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 52.21/PSD Avoidance	Low NOx Burner 03	Low NOx Burner
B004 (Boiler Group 1)	Boiler located at Building 310/The Hospital Plant. 17 MMBtu/hr fire tube boiler fired with natural gas and having No. 2 fuel oil as backup fuel (Installed 1998)	Rule 391-3-1-.02(2)(d) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 52.21/PSD Avoidance	Low NOx Burner 04	Low NOx Burner
B005 (Boiler Group 1)	Boiler located at Building 310/ the Hospital Plant. 17 MMBtu/hr fire tube boiler fired with natural gas and having No. 2 fuel oil as backup fuel (Installed 1998)	Rule 391-3-1-.02(2)(d) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 52.21/PSD Avoidance	Low NOx Burner 05	Low NOx Burner
B006 (Boiler Group 2)	Boiler located at main heating plant/Building 25910. 62.5 MMBtu/hr water tube boiler having low NO_x burners fired with natural gas and having No. 2 fuel oil as backup fuel (Installed 2004)	Rule 391-3-1-.02(2)(d) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 52.21/PSD Avoidance	Ultra Low NOx Burner 06	Ultra Low NOx Burner
B007 (Boiler Group 2)	Boiler located at main heating plant/Building 25910. 62.5 MMBtu/hr water tube boiler with low NO_x burners fired with natural gas and having No. 2 fuel oil as backup fuel (Installed 2004)	Rule 391-3-1-.02(2)(d) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 52.21/PSD Avoidance	Ultra Low NOx Burner 07	Ultra Low NOx Burner
B008 (Boiler Group 2)	Boiler located at main heating plant/Building 25910. 62.5 MMBtu/hr water tube boiler with low NO_x burners fired with natural gas and having No. 2 fuel Oil as backup fuel (Installed 2004)	Rule 391-3-1-.02(2)(d) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 52.21/PSD Avoidance	Ultra Low NOx Burner 08	Ultra Low NOx Burner

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
G001	Peaking Generator at Building 310 (hospital). 4,376 HP output (Caterpillar Model No. C175-16, 3000 kW, 2016 Model Year, Tier 4 certified. Installed 2017)	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart IIII	DOC01	Diesel Oxidation Catalyst
G002_PP1-1 (Peaking Generator Group 1)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kW_e, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1967).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 2	Catalytic Converter
G003_PP1-2 (Peaking Generator Group 1)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kW_e, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1967).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 3	Catalytic Converter
G004_PP1-3 (Peaking Generator Group 1)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1967).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 4	Catalytic Converter
G005_PP2-1 (Peaking Generator Group 1)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1966).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 5	Catalytic Converter

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
G006_PP2-2 (Peaking Generator Group 1)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1966).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 6	Catalytic Converter
G007_PP2-3 (Peaking Generator Group 1)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1966).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 7	Catalytic Converter
G008_PP3-1 (Peaking Generator Group 2)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1966).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 8	Catalytic Converter
G009_PP3-2 (Peaking Generator Group 2)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1966).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 9	Catalytic Converter
G010_PP3-3 (Peaking Generator Group 2)	Peaking Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 2125 HP output (1500 kWe, 15.9 MMBtu/hr @ 113 gph input; manufactured in 1966).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	CATCON 10	Catalytic Converter

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
G011	Emergency Generator at GENTS Facility/the main power plant/Building 25910. CI RICE with 428 HP output (300kW$_e$, 3.2 MMBtu/hr @ 22.7 gph input; manufactured in 2003).	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR 52.21/PSD Avoidance 40 CFR 63 Subpart ZZZZ	None	None
P001 (Paint Booth Group 1)	Paint Spray Booth #1, Building 14602 Vehicle and equipment maintenance. Installed after 1996.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF01	Dry Filter
P002 (Paint Booth Group 1)	Paint Spray Booth #2, Building 14602 Vehicle and equipment maintenance. Installed after 1996.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF01	Dry Filter
P003 (Paint Booth Group 1)	Paint Spray Booth #3, Building 14602 Miscellaneous coating operations. Installed after 1996.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(ii) avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF02	Dry Filter
P004 (Paint Booth Group 1)	Paint Spray Booth #4, Building 14602 Miscellaneous coating operations. Installed after 1996.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(ii) avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF02	Dry Filter
P005 (Paint Booth Group 1)	Paint Spray Booth #5, Building 14602 Miscellaneous coating operations. Installed after 1996.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(ii) avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF02	Dry Filter
P006 (Paint Booth Group 2)	TASC Paint Spray Booth #6 (HVLP spray gun with capacity of 5.6 gph), Building 15303. Coating plastic and extruded foam props such as rifles, machine guns, pistols, bombs, grenades and mines. Installed in 2006.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(a) Toxic Guideline 40 CFR 52.21/PSD avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF02	Dry Filter

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
P007 (Paint Booth Group 2)	TASC Paint Spray Booth #7 (HVLP spray gun with capacity of 5.6 gph), Building 15303. Coating wood furniture. Installed in 2006.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(a) Toxic Guideline 40 CFR 52.21/PSD avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DF02	Dry Filter
SJB	Sponge-Jet Blasting operation/ equipment in Building 14602.	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(n)	SJB01	Filter
WW1	Woodworking Area in Building 14601	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(a) Toxic Guideline 40 CFR 52.21/PSD avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DC01	Dust Collectors (Cyclone)
WW2	Woodworking Area in Building 14602	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(a) Toxic Guideline 40 CFR 52.21/PSD avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DC02	Dust Collectors (Cyclone)
WW3	Woodworking Area in Building 15303	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(e) Rule 391-3-1-.02(2)(a) Toxic Guideline 40 CFR 52.21/PSD avoidance 40 CFR 63.802 (Wood Furniture MACT) avoidance	DC03	Dust Collectors (Cyclone)

In this Title V renewal application Fort Gordon has requested the following changes to the permit:

Remove Boilers B001 and B002 – These boilers have not been operational for years and the building that houses them is officially abandoned and slated for demolition. Update the boiler ID No. groupings as shown in the table below.

Old ID No.	New ID No.
B003 (Group 4)	B003 (Boiler Group 1)
B004 (Group 4)	B004 (Boiler Group 1)
B005 (Group 4)	B005 (Boiler Group 1)
B006 (Group 8)	B006 (Boiler Group 2)
B007 (Group 8)	B007 (Boiler Group 2)
B008 (Group 8)	B008 (Boiler Group 2)

Remove the Lift Station CI RICEs - Three lift station/water pump diesel engines were previously listed on the permit but are not owned, operated, or maintained by Fort Gordon. Augusta Utilities Department fully owns, operates, and maintains these units.

Update the description and ID Nos. for the Wood Shop M002 to Woodworking Areas WW1, WW2, and WW3 with Dust Collectors (cyclones) DC01, DC02, and DC03; the Sponge-Jet Blast operation BL01 to SJB; and the Peaking Generators G001 through G010 as shown in table below.

Old ID No.	New ID No.
G001 (Group 1)	G001
G002 (Peaking Generator Group 2)	G002_PP1-1 (Peaking Generator Group 1)
G003 (Peaking Generator Group 2)	G003_PP1-2 (Peaking Generator Group 1)
G004 (Peaking Generator Group 2)	G004_PP1-3 (Peaking Generator Group 1)
G005 (Peaking Generator Group 2)	G005_PP2-1 (Peaking Generator Group 1)
G006 (Peaking Generator Group 2)	G006_PP2-2 (Peaking Generator Group 1)
G007 (Peaking Generator Group 2)	G007_PP2-3 (Peaking Generator Group 1)
G008 (Peaking Generator Group 3)	G008_PP3-1 (Peaking Generator Group 2)
G009 (Peaking Generator Group 3)	G009_PP3-2 (Peaking Generator Group 2)
G010 (Peaking Generator Group 3)	G010_PP3-3 (Peaking Generator Group 2)

Fort Gordon has reclassified the emergency generator G011 into the "Emergency Generators" grouping under insignificant activities. All permit conditions referencing the emergency generator G011 have been carried over into this renewal permit since they were included in past PSD avoidance permitting actions.

The affected permit conditions in this Title V renewal permit have been updated to include these changes.

B. Equipment & Rule Applicability

Equipment and Rule Applicability for this renewal permit is based on the requirements for the emission units as permitted in existing Permit No. 9711-245-0021-V-03-0 and Amendment No. 9711-245-0021-V-03-1 as discussed below.

Emission and Operating Caps:

Fort Gordon is a PSD major source for NOx, CO, and SO_2. The facility has taken limits to avoid PSD review. Conditions 3.2.1 to 3.2.8 of the current permit and amendments contain PSD avoidance limits. These conditions contain limits for VOC emissions, NOx emissions, operating hours, and fuel limits.

Rules and Regulations Assessment:

Rule 391-3-1-.02(2)(d) – "Fuel Burning Equipment"
The facility has various fuel burning equipment, including boilers and water heaters, subject to Rule (d). Fuel burning equipment built before January 1, 1972 is subject to Rule (d)1. Fuel burning equipment built on and after January 1, 1972 is subject to Rule (d)2. Rule (d) establishes the applicable PM emission limits (in pounds per MM Btu heat input) based the construction date and heat input capacity of the source and limits the visible emissions from the source to 20 percent opacity except for one 6-minute period per hour of not more than 27 percent opacity. Built after June 9, 1989, Boiler Nos. B003 to B008 are subject to this rule. Burning only natural gas and No. 1 or 2 fuel oil as back up, compliance with this rule is expected.

391-3-1-.02(2)(e) – "Particulate Matter from Manufacturing Process"
Rule (e) applies to sources with PM emissions at this facility not covered by a more specific rule or regulation, such as applying paint, wood working, and surface blasting. Rule (e) establishes the PM emission limit/allowable in pound per hour using equations based on the process weight input rate and construction date of the source involved. The facility is using various dry filter systems to control PM emissions from paint booths, surface blasting as well as the wood working shop. Therefore, compliance with this rule is expected.

391-3-1-.02(2)(b) – "Visible Emissions"
Rule (b) limits the visible emissions from a stationary source's vent or stack to 40 percent opacity or less if the source is not subject to other visible emission limit. This Rule, therefore, covers all of the sources subject to Georgia Rule (e) and Georgia Rule (g), except for the boilers which are subject to an opacity limit from Georgia Rule (d). The facility is using various dry filter systems to control PM emissions from paint booths, surface blasting as well as the wood working shop so compliance with this rule is expected.

391-3-1-.02(2)(g) – "Sulfur Dioxide"
Rule (g) allows the facility to use fuels containing up to 2.5 percent sulfur in fuel burning units including boilers, water and air heaters, and stationary SI and CI RICEs. The facility is complying with a fuel oil sulfur content limit of 0.5 percent by weight for to all boilers to avoid PSD/NSR for SO_2 emissions. Because of the fuel sulfur limitations in 40 CFR 60 Subparts IIII, JJJJ and 40 CFR 63 Subpart ZZZZ, the sulfur contents in all commercially available natural gas, gasoline, and diesel fuels are substantially below 2.5 percent by weight. Therefore, all the fuels used at this facility are in compliance with this rule

391-3-1-.02(2)(ff) – "Solvent Metal Cleaning"
This facility has several metal parts cleaning machines. Rule (ff) contains work practice standards to reduce VOC emissions. These parts cleaning machines are listed in the insignificant activities list. Part 8.0 of this permit contains a condition incorporating requirements of Rule (ff).

391-3-1-.02(2)(n) – "Fugitive Dust"

This facility has activities that may cause fugitive dust such as dirt roads and landfills. Rule (n) contains precautions and measurements for controlling fugitive emissions. Part 8.0 of this permit contains a condition incorporating requirements of Rule (n).

40 CFR 60 Subpart Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units"

Built after June 9, 1989 and having maximum design heat input capacity rates of greater than 10 MM Btu per hour but less than 100 MM Btu per hour, Boiler Nos. B003 through B008 are subject to NSPS Subpart Dc. Subpart Dc only requires these natural gas-fired boilers to keep monthly fuel usage records.

40 CFR 60 Subpart IIII – "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines"

Stationary compression ignition reciprocating internal combustion engine (CI RICE) subject to NSPS Subpart IIII at this facility are those constructed or reconstructed after July 11, 2005, including Peaking Generator No. G001 and dozens of CI RICEs driving emergency systems. This subpart requires the manufacturers to certify affected CI RICEs to the applicable EPA's emission standards for non-road engines based on the model year, maximum power and application of the CI RICEs. This subpart also requires the use of diesel fuel with a maximum sulfur content of 15 parts per million (ppm) (0.0015 percent by weight) and either a minimum cetane index of 40 or maximum aromatic content of 35 volume percent. This subpart limits the maintenance checks and readiness testing time for each emergency generator to no more than 100 hours per calendar year. This subpart also defines allowable operating circumstances, compliance demonstration, and specifies maintenance, recording keeping and reporting requirements. There is no operating time limit for emergency electricity generation. All the emergency RICEs are listed in the "Insignificant Activities Checklist" attached to this permit. Subpart 8.27 of this permit contains conditions incorporating requirements regulating the emergency CI RICEs. The emergency generator No. G011 is subject to certain PSD /NSR avoidance limits which have been referred to in several permit conditions under Parts 3, 5, and 6 of this permit. All the CI RICEs subject to NSPS Subpart IIII comply with 40 CFR 63 Subpart ZZZZ - "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" by complying with the requirements of NSPS IIII.

40 CFR 60 Subpart JJJJ – "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Two stationary spark ignition reciprocating internal combustion engines (SI RICEs) are subject to NSPS Subpart JJJJ. One is a 500 HP (375 KW) Cummins engine/generator (Engine M/N: GTA28, Generator M/N: GFTA, Generator S/N: 2532162; manufactured in August 2007). This engine is located in Building No. 25440. The other is a 47 HP (25 KW) Kohler engine/generator (Engine M/N: 109RL, Generator M/N: 25 RZGB, Generator S/N: 2277066; manufactured in 2010). It is located in Building No. 38803. Both are emergency SI RICEs/generators. Subpart JJJJ requires the Permittee to comply with the emission standards applicable to each of the engines by purchasing the engine certified to the applicable EPA emission standards for their model years and maximum site ratings. This subpart also sets gasoline fuel standards and limits the time for maintenance checks and readiness testing of each emergence generator to no more than 100 hours per calendar year. This subpart also defines allowable operating circumstances, compliance demonstration, and specifies maintenance, recording keeping and reporting requirements. There is no operating time limit for emergency electricity generation. Other SI RICEs at this facility were constructed or reconstructed before the

applicable dates of applicability, and therefore not subject to Subpart JJJJ. Instead, those SI RICEs meet the requirements of 40 CFR 63 Subpart ZZZZ. All the SI RICEs at this facility are for emergency electricity generation and listed in the "Insignificant Activities Checklist" attached to this permit. Subpart 8.27 of this permit contains a condition regulating these emergency SI RICEs.

40 CFR 63 Subpart ZZZZ – "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"

Existing stationary CI or SI RICEs are subject to 40 CFR 63 Subpart ZZZZ. All these RICEs are emergency units except the existing Peaking Generator Nos. G001 to G010. Subpart 8.27 of this permit contains conditions incorporating requirements of Subpart ZZZZ applicable to emergency RICEs at this facility.

Table 2d to Subpart ZZZZ has the following CO emissions standards for the existing Peaking Generator Nos. G002 to G010 (HP>500):

The Permittee shall use oxidation catalyst if necessary, to:

a. Limit concentration of CO in the exhaust to 23 ppmvd at 15 percent O_2; or

b. Reduce the CO emissions by 70 percent or more; and

c. Maintain the oxidation catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and

d. Maintain the temperature of the engines/generators' exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

The Permittee has elected to install a continuous parameter monitoring system (CPMS) to continuously monitor the oxidation catalyst outlet temperature on the peak shaving engine/generator equipped with an oxidation catalyst to control CO emissions. The installation, operation and maintenance of the CPMS shall meet the applicable requirements as specified in 40.6625(b) and Table 6 to Subpart ZZZZ and incorporated into conditions in Section 5.2 of this permit. However, per 40 CFR 63.6615, for any of the Peaking Generator Nos. G01 through G10 (HP>500) not equipped with a CO CEMS, the Permittee shall conduct subsequent performance tests after the initial performance tests on the engine/generator involved to demonstrate compliance with the applicable CO emission standard or reduction requirement every 8,760 hours of operation or every 3 calendar years, whichever comes first, as specified in Tables 3, 4 and 6 to Subpart ZZZZ and incorporated into Condition 4.2.1 of this permit.

It is noted that all the RICEs at this facility are considered as "institutional RICEs." Per 40 CFR 63.6585(f) and 63.6590(a)(1)(iii), as an "institutional CI RICE", any existing emergency stationary CI RICE constructed or reconstructed before June 12, 2006 will not be subject to Subpart ZZZZ provided that the CI RICE is operated exclusively during the emergency power generation and maintenance checks and readiness testing as specified in Condition 3.2.9. Since these existing emergency stationary CI RICEs are not subject to NSPS Subpart IIII, their operation shall be regulated by pertinent SIP rules.

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

All the boilers at this facility were constructed or reconstructed on or before June 4, 2010, and therefore are considered as existing affected sources under 40 CFR 63 Subpart JJJJJJ - "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source." None of the boilers will be subject to Subpart JJJJJJ or any requirements of 40 CFR Part 63 per 40 CFR 63.11195(e) and 63.11237, because the facility will be operating each of the boilers exclusively as a "gas-fired boiler" that:

a. Burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. And

b. Tests firing liquid fuel for no more than a combined total of 48 hours during any calendar year.

40 CFR Part 64 – "Compliance Assurance Monitoring (CAM)"

This facility does not have any emission units that would be subject to the provisions of 40 CFR Part 64 - "Compliance Assurance Monitoring (CAM)." The depainting and surface coating/paint spray operations with Emission Unit ID Nos. SJB, P001 - P007 and the wood shops with Emission Unit ID Nos. WW1, WW2, and WW3, are the only emission units that are equipped with air pollution control devices. None of these emission units have a potential pre-controlled emission rate that is greater than a major source threshold (100 tpy of any criteria pollutant). Therefore, none of the emission units in the facility are subject to the CAM requirement.

C. Permit Conditions

Permit conditions from existing Permit No. 9711-245-0021-V-03-0 and Amendment No. 9711-245-0021-V-03-1, are carried over into this permit as noted below. As previously noted, for this renewal permit the Permittee has removed Boilers B001, B002 and the Lift Station CI RICEs, and updated ID Nos. for the Peaking Generators and Woodworking Areas. The permit conditions in Part 3.2, 3.3, 3.4 and 3.5 have been modified to reflect these changes.

Conditions 3.2.1 through 3.2.8 contain various operating limits, fuel oil sulfur content limits and emission limits allowing the identified peaking CI RICEs/generators, boilers and paint spray booths to avoid PSD/NSR reviews in the past.

Conditions 3.2.9 through 3.2.12 establish the operating requirements of 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ to the stationary RICEs/generators as applicable.

Condition 3.2.13, which establishes the operation of Boiler Nos. B003 through B008 as "Gas-fired Boilers" under 40 CFR 63 Subpart JJJJJJ, has been updated to reflect the current permitting language.

Condition 3.3.1 establishes the applicability of 40 CFR 60 Subpart A – "General Provisions" to the boilers and Peaking Generator No. G001. Condition 3.3.2 establishes the applicability of 40 CFR 60 Subpart Dc to the boilers.

Conditions 3.3.3 through 3.3.6 require the Permittee to comply with all the applicable emission limitations, operating limitations, and other requirements in 40 CFR 63 Subpart ZZZZ for the peaking generators. Conditions 3.3.8 and 3.3.9, containing the applicable compliance requirements of 40 CFR 60 Subpart IIII for the Lift Station CI RICEs and Peaking Generator No. G001, have been consolidated into Condition 3.3.7 and 3.3.8. The Lift Station CI RICEs are removed from this condition.

Condition 3.4.1 establishes the applicability of Georgia Rule (b). Conditions 3.4.2 and 3.4.3 establish the applicability of Georgia Rule (d). Condition 3.4.4 establishes applicability of Georgia Rule (e). Condition 3.4.5 contains a 100 tpy VOC emission limit to allow Paint Spray Booth Nos. P003, P004 and P005 to avoid Rule 391-3-1-.02(2)(ii).

Conditions 3.5.1, 3.5.2 and 3.5.3 contain operating and maintenance requirements to ensure the proper function of the PM control systems identified, and consequently compliance with the applicable PM and visible emission limits.

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

Old Condition 4.2.1 has been removed. The facility has conducted initial performance tests on the Peaking Generator Nos. G002 through G010 to demonstrate initial compliance with the requirements to reduce CO emissions by 70 percent. This condition is no longer needed.

Condition 4.2.2 has been renumbered as Condition 4.2.1 and carried over into this permit. The only change is updating the ID Nos. of the peaking generators and removing references to a CEMS. The facility is not using a CEMS to monitor CO emissions. This condition establishes a repeat CO emission testing requirement under Subpart ZZZZ for any of the Peaking Generator Nos. G002_PP1-1 through G010_PP3-3 having site ratings greater than 500 HP. The subsequent performance tests shall be conducted on each of the RICEs/peaking generators to demonstrate compliance with the applicable CO emission standard or reduction requirement every 8,760 hours of operation or every 3 calendar years, whichever comes first, as specified in Tables 3 and 6 of Subpart ZZZZ.

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

Monitoring requirements from existing Permit No. 9711-245-0021-V-03-0 and Amendment No. 9711-245-0021-V-03-1, are carried over into this permit as noted below. As previously noted, for this renewal permit the Permittee has removed Boilers B001, B002 and the Lift Station CI RICEs, and updated ID Nos. for the Peaking Generators and Woodworking Areas. The permit conditions in Part 5.2 have been modified to reflect these changes.

Condition 5.2.1 contains monitoring requirements for the peaking generators, emergency generator, boilers, and filter/baghouse control systems. These monitoring requirements include using non-resettable cumulating hour meters and fuel consumption meters, and recording operating hours, fuel usage, pressure drop, and engine exhaust gas temperature.

Condition 5.2.2 requires weekly inspections and maintenance records of the filter/baghouse control systems for the specified sources. Records of inspections and maintenance shall be maintained and kept in a form suitable for inspection or submittal to the Division.

Condition 5.2.3 requires a Utility Monitoring and Control System (UMCS) to continuously monitor and record the electrical output, in kilowatts (kW), of each peaking generator.

Conditions 5.2.4 and 5.2.5 require the Permittee to monitor monthly NOx and SO_2 emissions from the emergency generator No. G011 and the SO_2 emissions from Boiler Nos. B006, B007 and B008. Both conditions ensure the compliance with the relevant emission limits established in the past to avoid PSD/NSR review.

Old Condition 5.2.6, which contained 40 CFR 63 Subpart ZZZZ monitoring requirements for using a CO CEMS on the peak shaving RICEs/Peaking Generator Nos. G002 to G010, has been removed. The facility has elected not to install a CEMS and is using a CPMS to demonstrate compliance.

Condition 5.2.6 (previously Condition 5.2.7) includes the installation, operation and maintenance requirements for the CPMS under 40 CFR 63 Subpart ZZZZ for each of the peak shaving RICEs/Peaking Generator Nos. G002 to G010. The Permittee also needs a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control of the CPMS, as applicable.

Condition 5.2.7 (previously Condition 5.2.8) incorporates the data collection and processing requirements during monitor malfunction, associated repairs, required performance evaluations, and required quality assurance or control activities under 40 CFR Subpart ZZZZ.

Condition 5.2.8 (previously Condition 5.2.7) incorporates the applicable requirements under 40 CFR 63 Subpart ZZZZ which require the Permittee to operate and maintain each of the Peaking Generator Nos. G001 through G010 and associated after-treatment control device (if any), according to the manufacturer's emission-related written instructions or develop a site-specific maintenance plan. The site-specific maintenance plan shall provide to the extent practicable for the maintenance and operation of the engine/generator in a manner consistent with good air pollution control practice for minimizing emissions.

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

Recordkeeping and reporting requirements from existing Permit No. 9711-245-0021-V-03-0 and Amendment No. 9711-245-0021-V-03-1, are carried over into this permit as noted below. As previously noted, for this renewal permit the Permittee has removed Boilers B001, B002 and the Lift Station CI RICEs, and updated ID Nos. for the Peaking Generators and Woodworking Areas. The permit conditions in Parts 6.1 and 6.2 have been modified to reflect these changes.

Conditions 6.2.1 through 6.2.8 include recordkeeping requirements for fuel oil sulfur content, fuel oil usage, and peak shaving generator operating time and amount of energy generated for the specified units.

Conditions 6.2.9, 6.2.10 and 6.2.11 include keeping records of fuel usage, NOx and SO_2 emissions and semiannual reporting requirements for the boilers and peaking generators.

Conditions 6.2.12 through 6.2.19 contain the recordkeeping, emission calculation/compliance determination, maintenance and inspection requirements from the coating, blasting and woodworking operations for VOC and PM emissions.

Existing Condition 6.2.20 requiring annual inspections and maintenance on the Woodshop M002 Baghouse BH01 has been removed and replaced by cyclones in Woodworking Areas WW1, WW2, and WW3 for PM control.

Existing Conditions 6.2.21 through 6.2.29, which contain the 40 CFR 63 Subpart ZZZZ recordkeeping and reporting requirements for the peaking generators G002 thru G010, have been renumbered as Conditions 6.2.20 through 6.2.28 due to the removal of Condition 6.2.20.

Existing Condition 6.2.30 requiring emission certification for the Lift Station CI RICE per 40 CFR 60 Subpart IIII has been removed. These engines are not owned, operated, or maintained by Fort Gordon so this condition is no longer needed.

Condition 6.2.29, previously Condition 6.2.32, contains the 40 CFR 60 Subpart IIII recordkeeping requirements for peaking generator G001. Existing Conditions 6.2.31, 6.2.33, 6.2.34, and 6.2.35 have been removed. The Permittee has completed the notification and reporting requirements for the replacement of peaking generator G001. These conditions are no longer needed and have been removed.

VII. Specific Requirements

A. Operational Flexibility

None applicable.

B. Alternative Requirements

None applicable.

C. Insignificant Activities

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

D. Temporary Sources

None applicable.

E. Short-Term Activities

None applicable.

F. Compliance Schedule/Progress Reports

None applicable.

G. Emissions Trading

None applicable.

H. Acid Rain Requirements

None applicable.

I. Stratospheric Ozone Protection Requirements

None applicable.

J. Pollution Prevention

None applicable.

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.

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.//