

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-00300012-2013**
Application Received: **March 28, 2013**
Plant Identification Number: **03-054-00300012**
Permittee: **Guardian Fiberglass, Inc.**
Facility Name: **Inwood Plant**
Mailing Address: **4812 Tabler Station Road, Inwood, WV 25428**

Physical Location: Inwood, Berkeley County, West Virginia
UTM Coordinates: 756.55 km Easting • 4,365.50 km Northing • Zone 17
Directions: From Martinsburg, take I-81 southwest to Tabler Station Road, Exit 8 (County Route 32). Site is located on the southeast corner of the I-81 and County Route 32 intersection.

Facility Description

Raw Materials are mixed into a batch and the batch is then melted to form glass. The molten glass is separated into streams by use of a forehearth and fiber is spun into strands by the means of fiberizers. The fibers are collected to form a blanket then cured in a three-zone oven. Upon exiting the curing oven the blanket is cooled using a "cooling table". The cooled blanket is then cut to size in rolls and batts of insulation per customer requirements. The facility is characterized by SIC code 3296 (wool fiberglass manufacturing).

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2011 Actual Emissions ¹
Carbon Monoxide (CO)	256.5	66.39
Nitrogen Oxides (NO _x)	158.1	13.47
Particulate Matter (PM _{2.5})	161.7 ³	18.70 ³
Particulate Matter (PM ₁₀)	162.2	18.70 ³
Total Particulate Matter (TSP)	165.2	18.96
Sulfur Dioxide (SO ₂)	0.3	0.02
Volatile Organic Compounds (VOC)	125.6	19.37 ²
Hazardous Air Pollutants	Potential Emissions	2011 Actual Emissions
Formaldehyde	28.1	1.265
Methanol	82.5	7.263
Phenol	54.3	5.611
Regulated Pollutants other than Criteria and HAP	Potential Emissions	2011 Actual Emissions
Formic acid	13.6	0.51 ³
Ammonia	163.9	34.48 ³

¹ Except as noted, the 2011 Actual Emissions are transcribed from the 2012 Certified Emissions Statement Invoice, and represent emissions from January 1, 2011, through December 31, 2011.

² Actual VOC emissions include 14.1393 tons of the VOC-HAPs formaldehyde, methanol, and phenol.

³ This data is from technical correspondence received from the permittee (letter received 6/19/2013).

This facility has the potential to emit 92,500 tons per year of carbon dioxide equivalent (CO₂e), which is less than 100,000 tons per year. Additionally, the facility has potential emissions less than 100 tons per year of greenhouse gases (GHGs) on a mass basis.

Title V Program Applicability Basis

This facility has the potential to emit 256.5 tpy of CO; 158.1 tpy of NO_x; 162.2 tpy of PM₁₀; 125.6 tpy of VOC; 28.1 tpy of formaldehyde; 82.5 tpy of methanol; and 54.3 tpy of phenol. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Guardian Fiberglass, Inc. – Inwood Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM from indirect heat exchangers
	45CSR6	Open burning prohibited
	45CSR7	PM from manufacturing processes
	45CSR10	Control of Air Pollution from Sulfur Oxides
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction/Modification permitting
	45CSR14	Prevention of Significant Deterioration
	45CSR16	Standards of Performance for New Stationary Sources pursuant to 40 C.F.R. Part 60
	45CSR34	Emission Standards for HAPs pursuant to 40 C.F.R. Part 63
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Subpart PPP	NSPS: Wool Fiberglass Insulation Mfg. Plants.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart NNN	NESHAPs MACT: Wool Fiberglass Mfg.
	40 C.F.R. Part 63, Subpart ZZZZ	NESHAPs MACT: Stationary RICE
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR27	Control of Emissions of Toxic Air Pollutants

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R14-0015K	September 24, 2009	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

- I. **Permit R14-0015K.** The current operating permit contains requirements of R14-0015J, which has been superseded by Class I Administrative Update permit R14-0015K. The sole purpose of the update was to change the size of Tank M10 from 1,500 gallons to 750 gallons. This change is reflected in the “TANKS (Group 001)” portion of subsection 1.1. of the renewal operating permit. Title V condition 3.1.19. and subsection 1.2. have been revised for the current revision of the underlying permit.

As discussed in Section III.f.iv. of this Fact Sheet, certain language pertaining to decommissioned control device CD25B has been removed from requirement 5.1.2. of R14-0015K (Title V condition 8.1.1.).

The permittee requested that requirement 5.1.4. of R14-0015K be clarified to indicate that the operational limit of 500 hours per year is “per engine”. This writer examined the preliminary determination for permit R14-0015, dated January 24, 2002, and the determination stated the emission factors for each of the engines (one of the Caterpillar 3406 engines has since been replaced by a Caterpillar 3456), and that the permittee has estimated the annual emissions from the engines using 500 operational hour per year. This writer calculated several of the current permit limits using the emission factors in the determination, and thereby verified that the operational limit of 500 hours per year is indeed for each engine. Therefore, the clarifying language “per engine” has been added following existing language “500 hours per year” in permit condition 9.1.2. The permittee should have this change made as part of any revision to permit R14-0015K.

The testing in requirement 4.3.1. of the underlying permit (Title V condition 3.3.10.) was performed during the period from November 12-17, 2007 for both Line 1 and Line 2. Test results indicated compliance with the emission limitations in Title V conditions 6.1.2. and 7.1.1. Line 2 was idled on April 4, 2008 due to the economy and has not operated since that time. During the period from December 11-13, 2012 Line 1 was tested, and results indicated compliance with the emission limitations. Since the testing has been ongoing, and certain components of condition 3.3.10. are referenced by other testing conditions, the requirement in Title V condition 3.3.10. is retained in the renewal permit.

No additional changes have been made in the renewal operating permit related to permit R14-0015K.

- II. **Revisions to Facility-wide Requirements.** Multiple “boilerplate” conditions have been revised during the current permit term, which are incorporated into the renewal operating permit as follows:
- a. Conditions 3.1.1. and 3.1.2. – Language has been revised to reflect current rule 45CSR6.
 - b. Condition 3.1.3. – Condition language and the citation of authority have been revised to reflect current language of operating permits.
 - c. Conditions 3.1.7.a., b., and c. – Formatting of the referenced citations has been revised.
 - d. Condition 3.3.1.d. – This new “boilerplate” condition has been added and the citation of authority revised.
 - e. Condition 3.4.3. – This “boilerplate” condition has been revised to reflect current operating permit language.

- f. Condition 3.5.3. – This “boilerplate” condition has been revised to reflect change to condition 3.5.5. Additionally, the USEPA office nomenclature has been revised.
- g. Condition 3.5.4. – This “boilerplate” condition has been revised to reflect current operating permit language not requiring the receipt be located at the facility.
- h. Condition 3.5.5. – This “boilerplate” condition has been revised to reflect current operating permit language specifying that submittal to USEPA shall be in electronic format only.
- i. Condition 3.5.6. – This “boilerplate” condition has been revised to reflect current operating permit language allowing submittal to be “on or before” the specified due date, rather than “on” the due date.
- j. Current condition 3.5.8.c. – This condition (requiring certification by a responsible official) has been deleted since it is redundant with condition 3.5.8.a.1.

III. **Revisions due to Facility Changes.** In section 1.2. of the renewal application, and in technical correspondence, the permittee listed several changes since the current Title V permit was issued. They are listed below along with an explanation as to how they are either already in the Title V permit, or how the change will be incorporated into this renewal permit.

- a. **Additional Spinner.** According to the application, another spinner has been added to Line 1 (ES13A). This additional spinner does not increase the maximum throughput of 8,000 lbs/hr for the line. The additional spinner ES13A is already included in the current Title V permit; therefore, no change will be made for the renewal.
- b. **Control Device Changes.** There have been minor control device changes to the cold end of the facility, where the fiberglass product is collected, cut, and packaged. Units that have been routed to a scrubber are now routed to a cyclone and screen room. Therefore, the following changes are made to the emissions unit table in Section 1.1. of the renewal permit.
 - i. Under FACING SIZING & PACKAGING FOR LINE 1 (Group 008), for Em. Unit IDs: ES15C and ES15H, the control device is changed from CD15A (wet collection system) to CD15C and CD15D. For ES15I, the control devices CD15C and CD15D are written in addition to CD15A.
 - ii. Under FACING SIZING & PACKAGING FOR LINE 1 (Group 008), Control Devices CD15C (dual cyclone and condenser) and CD15D (screen rooms) have been added.
 - iii. Under FACING SIZING & PACKAGING FOR LINE 2 (Group 008), for Em. Unit IDs: ES25H and ES25I, the control device is changed from CD25A (venturi scrubbers) to CD25C.
 - iv. Under FACING SIZING & PACKAGING FOR LINE 2 (Group 008), Control Devices CD25C (dual cyclone and condenser) and CD25D (screen room) have been added.
- c. **Decommissioning of Space Heating Boiler.** The 14.646 MMBtu/hr natural gas-fired space heating boiler (Em. Unit ID: ESSHB14; Em. Pt. ID: EP21) has been removed from service. This source is listed near the end of section 1.1. of the current operating permit, as well as in various conditions in permit section 9.0. To account for this change, the following sections and conditions have been modified in the renewal permit.
 - i. Section 1.1. – The row and its contents for emission unit ESSHB14 are deleted.

- ii. Section 9.0. (heading) – The emission unit ID and emission point ID are deleted.
 - iii. Condition 9.1.4. – The condition is from underlying permit R14-0015K, 5.1.6., and limits the fuel combusted in ESSHB14 to being pipeline quality natural gas. Considering that the source has been decommissioned, it is acceptable to delete the source from the language of the requirement. In particular, the language “14.6 MMBTU/hr boiler (ID No. ESSHB14),” has been deleted. The permittee should have this change made as part of any revision to permit R14-0015K.
 - iv. Condition 9.1.5. (current permit) – The condition is from underlying permit R14-0015K, 5.1.7. Since the source has been decommissioned, it is acceptable to not include the requirement in the renewal permit.
 - v. Condition 9.1.6. (formerly 9.1.7.) – The requirement is applicable to multiple emission units, among which ESSHB14 is listed in parenthesis following the citation of authority. The source has been deleted from this list.
 - vi. Condition 9.1.8. (current permit) – The condition is from 45CSR§10-3.3.f. and was applicable to the source. Since the source has been decommissioned, it is acceptable to not include the requirement in the renewal permit.
- d. **Air Handling Unit Design Capacity.** The design capacity of the air handling unit (Em. Unit ID: ESSH15) is changed from 8.5 MMBtu/hr to 8.525 MMBtu/hr to more accurately describe the existing source. This change does not trigger or exempt the source from any applicable requirement.
- e. **Emergency Fire Water Pump Engine (Em. Unit ID: ESW11) Design Capacity Correction.** The current reference to “1,000 Gallons of Diesel Fuel” is incorrect, and has been changed to 255-hp in accordance with technical correspondence received from the permittee on 6/19/2013.
- f. **Bag Filter Dust Collector (Control Device ID: CD25B) Removed from Service.** According to technical correspondence received from the permittee on 6/19/2013, control device CD25B has been removed from the facility. Emissions are controlled using the cyclone and condenser (CD25C), and screen room (CD25D), as shown in the process flow diagrams in application Attachment C. Therefore, CD25B is removed in the following parts of the renewal permit:
- i. In section 1.1., under FACING SIZING & PACKAGING FOR LINE 2 (Group 008), the row for control device CD25B is deleted.
 - ii. In section 1.1., under FACING SIZING & PACKAGING FOR LINE 2 (Group 008), for Em. Unit IDs: ES25K and ES25L, the control device is changed from “CD25B” to “CD25C and CD25D”.
 - iii. CD25B is deleted from the section 8.0 heading.
 - iv. In condition 8.1.1., the language “and the bag filter dust collector (CD25B)” is not included as in requirement 5.1.2. of permit R14-0015K. Removing this control device from the requirement does not affect the requirement to meet the particulate matter emission limits prescribed in the condition.

IV. **40 C.F.R. 60 Subpart PPP – Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants.** This subpart applies to each rotary spin wool fiberglass insulation manufacturing line constructed, modified, or reconstructed after February 7, 1984. Thus, Subpart PPP applies to the Inwood facility. Subpart PPP sets a particulate matter standard of 11.0 lbs/ton glass pulled (cf. §60.682). Facilities comply with the mass emission rate via monitoring operations and utilizing control devices. Subpart PPP prescribes recordkeeping and reporting activities associated with maintaining the elected control device. The Inwood facility is subject to Subpart PPP, the applicable requirements of which are already incorporated into the current Title V permit as conditions 3.1.22., 3.3.13., 3.3.16. through 3.3.18., 6.2.1., 6.2.2., 6.2.4., 6.2.5., 6.3.2., and 6.4.1. through 6.4.3.

V. **40 C.F.R. 63 Subpart NNN – National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing.** This NESHAP-MACT applies to equipment located at wool fiberglass manufacturing facilities, as defined as manufacturing wool fiberglass on a rotary spin manufacturing line or on a flame attenuation manufacturing line. The Inwood facility is subject to the applicable emission limits, work practices, monitoring, recordkeeping, and reporting prescribed in Subpart NNN, which were incorporated into the current Title V permit as conditions 3.1.18., 3.2.1., 3.2.2., 3.3.4. through 3.3.9., 3.4.4., 3.4.5., 3.4.8. through 3.4.10., 3.5.10. through 3.5.14., 4.1.4., 5.1.1. through 5.1.3., 5.2.1., 5.2.2., 5.4.1., 6.1.1., 7.1.2., 7.1.3., and 7.2.1. These conditions are retained for the renewal permit without revision.

On November 25, 2011, U.S. EPA proposed amendments to Subpart NNN based upon residual risk and technology review. According to technical correspondence¹, U.S. EPA expects to promulgate the proposed regulation on January 30, 2014. Therefore, the current Subpart NNN permit conditions based upon the 1999 MACT standard that continue to embody the applicable requirements have been carried over into the renewal operating permit as mentioned above.

Renewal permit condition 2.5.1. (Reopening for cause) will be utilized if there are three or more years in the permit term to incorporate the proposed changes when the proposed amendments of the regulation are promulgated. Additionally, permit condition 3.5.9. (New applicable requirements) requires the permittee to comply with such requirements in a timely manner.

VI. **40 C.F.R. 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.** This regulation establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The facility is a major source of HAP that utilizes the following RICE, which are evaluated to determine the applicability of Subpart ZZZZ to them:

a. **Emergency Fire Water Pump Engine (Em. Unit ID: ESW11).** This compression ignition (CI) RICE was constructed in 1998 and is rated at 255-hp. The engine is an *Existing stationary RICE* since it meets the horsepower and construction date criteria in §63.6590(a)(1)(ii). The engine does not meet any of the criteria to be subject to limited requirements or NSPS requirements under §§63.6590(b) or (c), respectively. The applicable requirements are given below, along with a discussion as to how and where they are incorporated into the Title V permit.

¹ Email dated May 7, 2013 from Susan Fairchild, Senior Environmental Scientist, U.S. EPA, Research Triangle Park, NC.
West Virginia Department of Environmental Protection • Division of Air Quality

Subpart ZZZZ Section	Condition	Discussion
§63.6595(a)(1)	9.1.9.	Since the engine is an existing stationary CI RICE with a site rating less than or equal to 500-bhp located at a major source of HAP emissions, the compliance date is May 3, 2013, in accordance with §63.6595(a)(1). The compliance date is now past; however, it will be retained in the permit indicating that the RICE must now be in compliance with the MACT.
§63.6600	None	This section is not applicable since the unit is rated less than 500 brake HP.
§63.6601	None	This section is not applicable since the unit is existing.
§63.6602	9.1.10.	Since the engine is an existing stationary CI RICE with a site rating less than or equal to 500-bhp located at a major source of HAP emissions, the engine must comply with the applicable emission limitations in Table 2c to Subpart ZZZZ in accordance with §63.6602. The applicable requirements in Table 2c are Item #1, and have been set forth as a permit condition. Additionally, applicable requirement §63.6625(h) is included and cited in this permit condition since it repeats the requirement to minimize the engine's time spent at idle and to minimize the startup time.
§63.6603	None	This section is not applicable since the unit is located at a major source.
§63.6604(a)	None	This section is not applicable since the unit is an emergency unit.
§63.6604(b)	None	This section is not applicable since the unit does not generate electricity.
§63.6604(c)	None	This section is not applicable since the unit is existing.
§63.6604(d)	None	This section is not applicable since the unit is not located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at an area source in Alaska, or on an offshore vessel.
§63.6605(a)	None	This section is not applicable since the unit is not subject to emission limitations and operating limitations of Subpart ZZZZ.
§63.6605(b)	9.1.11.	The general requirement §63.6605(b) is applicable, and is set forth as a permit condition.
§63.6610	None	This section is not applicable since the unit is rated less than 500 brake HP.
§63.6611	None	This section is not applicable since the unit is existing.
§63.6612	None	<p>This section is applicable since the unit is existing, and rated less than 500 brake HP at a major source. However, no specific requirements in §63.6612 apply to the unit, as is demonstrated below.</p> <p>§63.6612(a) refers to applicable requirements in Table 4 to Subpart ZZZZ. Row 1 of Table 4 can apply to CI stationary RICE that are complying with the requirement to reduce CO emissions. However, the unit is not subject</p>

Subpart ZZZZ Section	Condition	Discussion
		to any requirement to reduce CO emissions; therefore, §63.6612(a) does not apply. §63.6612(b) applies in the case when testing has already been performed. This requirement is not applicable to the unit.
§63.6615	None	This section is not applicable since the unit is not subject to emission limitations and operating limitations under Subpart ZZZZ.
§§63.6620(a) through (i)	None	This section is not applicable since the unit is not subject to emission limitations and operating limitations under Subpart ZZZZ.
§63.6625(a)	None	This section is not applicable since there is no CEMS for the unit.
§63.6625(b)	None	This section is not applicable since there is no CPMS for the unit.
§63.6625(c)	None	This section is not applicable since the unit does not fire landfill gas or digester gas.
§63.6625(d)	None	This section is not applicable since the unit is an existing CI RICE.
§63.6625(e)	9.1.12.	Since the RICE is an existing emergency stationary RICE with a site rating of less than or equal to 500-hp located at a major source of HAP emissions, the requirement to operate and maintain the RICE in accordance with the manufacturer's instructions or to develop your own plan pursuant to §63.6625(e) is applicable. The language of both §63.6625(e) and §63.6625(e)(2) have been combined for the permit condition.
§63.6625(f)	9.1.13.	Since the RICE is an existing emergency stationary RICE with a site rating of less than or equal to 500-hp located at a major source of HAP emissions, the requirement to install a non-resettable hour meter (if not already installed) pursuant to §63.6625(f) is applicable. The non-applicable language "or an existing emergency stationary RICE located at an area source of HAP emissions" has not been included in the condition.
§63.6625(g)	None	This section is not applicable since the unit is an emergency CI RICE.
§63.6625(h)	9.1.10.	This section is applicable to the unit, and has already been included in the requirements of §63.6602, Table 2c, item # 1. Thus, this section is cited along with §63.6602 rather than writing a separate and redundant condition.
§63.6625(i)	9.1.14.	The option of utilizing an oil analysis program pursuant to §63.6625(i) is applicable, excluding non-applicable language.
§63.6625(j)	None	This section is not applicable since the unit is not a SI RICE.
§§63.6630(a) through (c)	None	§63.6630(a) is not applicable since the unit is not subject to emission and operating limitations from Subpart ZZZZ.

Subpart ZZZZ Section	Condition	Discussion
		<p>§63.6630(b) is not applicable since the unit is not subject to operating limitations from Subpart ZZZZ.</p> <p>The NOCS content requirement of §63.6630(c) is not applicable since none of the requirements in §§63.6630(a) through (b) are applicable.</p>
§§63.6635(a) through (c)	None	<p>§63.6635(a) is not applicable since the unit is not subject to emission and operating limitations from Subpart ZZZZ.</p> <p>§§63.6635(b) and (c) are not applicable since the unit is not subject to any continuous monitoring in Subpart ZZZZ.</p>
§63.6640(a)	9.1.12.	<p>The requirement to demonstrate continuous compliance with the applicable work practice and management practices in Table 2c to Subpart ZZZZ pursuant to §63.6640(a) is applicable. In particular, the requirements in Item #9 of Table 6 to Subpart ZZZZ are applicable. However, these requirements are already set forth in permit condition 9.1.12. Therefore, only the citation of §63.6640(a) is added to the permit condition.</p>
§63.6640(b)	9.5.3	<p>The deviation reporting requirement of §63.6640(b) is applicable since it pertains to applicable Table 2c requirements. Non-applicable language in the regulation has not been included in this permit condition. Since the engine is not subject to an emission limitation, this language has been replaced with “work practice” in the first sentence. Due to the requirement to report according to §63.6650, a parenthetical reference to the corresponding permit condition has been added at the end of the permit condition.</p>
§63.6640(c)	None	<p>This section is not applicable since the unit is neither a 4SLB, nor a 4SRB, stationary RICE.</p>
§63.6640(d)	None	<p>This section is not applicable since the unit is existing.</p>
§63.6640(e)	9.5.4.	<p>The deviation reporting requirement of §63.6640(e) is applicable since it pertains to Table 2c requirements, and is set forth as permit condition.</p>
§§63.6640(f) and (f)(1)	9.1.15. 9.1.15.(1)	<p>In general, the requirements of these sections are applicable for emergency stationary RICE. §63.6640(f)(1) is applicable. An italicized note has been added following 9.1.15.(1) to reference the more stringent operational limitation in R14-0015K, 5.1.4. (condition 9.1.2.).</p>
§63.6640(f)(2)	9.1.15.(2)	<p>This section is applicable. However, requirements under §§63.6640(f)(2)(ii) and (iii) are not applicable since the unit is not utilized to generate electricity. Therefore, only §§63.6640(f)(2) and 63.6640(f)(2)(i) are included in the permit condition.</p>

Subpart ZZZZ Section	Condition	Discussion
§63.6640(f)(3)	9.1.15.(3)	This section is applicable. However, non-applicable language regarding peak shaving, non-emergency demand response, or to generate income by supplying power is excluded.
§63.6640(f)(4)	None	This section is not applicable since the unit is located at a major source of HAP.
§§63.6645(a) and (a)(5)	None	This section provides an exemption to the notification requirements (including the NOCS under 40 C.F.R. §63.9(h)) for an existing stationary emergency RICE (cf. §63.6645(a)(5)). Since the unit meets the criterion, the notifications under §63.6645 do not apply.
§63.6645(b)	None	This section is not applicable since the unit is rated less than 500 brake HP.
§63.6645(c)	None	This section is not applicable since the unit is existing and rated less than 500 brake HP.
§63.6645(d)	None	This section is not applicable since an initial notification is not required. Requirements for initial notification are in §63.9(b), which is not applicable, in accordance with the determination regarding §63.6645(a)(5).
§63.6645(e)	None	This section is not applicable since the unit is existing.
§63.6645(f)	None	This section is not applicable since an initial notification is not required.
§§63.6645(g) and (h)	None	These sections are not applicable to the unit since no performance tests or initial compliance demonstrations are required under Subpart ZZZZ.
§§63.6650(a) and (b)	None	These sections are not applicable to the unit since it meets none of the criteria in Table 7 to Subpart ZZZZ.
§63.6650(c)	None	This section is not applicable since it pertains to Compliance Reports, which are not required for the unit since it meets none of the criteria in Table 7 to Subpart ZZZZ.
§§63.6650(d) and (e)	None	This section is not applicable since no CMS is employed for the unit.
§63.6650(f)	9.5.5.	The deviation reporting requirement of §63.6650(f) is applicable. Language in this section of Subpart ZZZZ has been adapted for incorporation into the renewal operating permit as condition.
§63.6650(g)	None	This section is not applicable since the unit is existing and does not fire landfill gas or digester gas.
§63.6655(a)	None	This section does not apply since the unit is not subject to emission and operating limitations.
§63.6655(b)	None	This section does not apply since neither CEMS nor CPMS are employed for the unit.
§63.6655(c)	None	This section is not applicable since the unit is existing and does not fire landfill gas or digester gas.
§63.6655(d)	None	This section does not apply since the unit is not subject to emission and operating limitations.

Subpart ZZZZ Section	Condition	Discussion
§63.6655(e)	9.4.3.	The maintenance recordkeeping of §63.6655(e) is applicable since the RICE meets the criteria of §63.6655(e)(2).
§63.6655(f)	9.4.4.	The requirement to record hours of operation in §63.6655(f) is applicable since the RICE meets the criteria of §63.6655(f)(1). The language of both §63.6655(f) and §63.6655(f)(1) have been combined to create one coherent and applicable condition.
§63.6660(a), (b), and (c)	9.4.5.	The requirements for format and retention of records specified in §63.6660 are applicable.

Other requirements in Subpart ZZZZ are not applicable to emission unit ESW11 for one or more of the following reasons:

- The requirement does not apply to compression ignition (CI) RICE.
- The requirement does not apply to emergency RICE.
- The requirement does not apply to existing RICE.
- The requirement does not apply to RICE located at a major source of HAP emissions.
- The requirement pertains to RICE within ranges of brake horsepower not applicable to the source.
- The requirement pertains to engines that combust landfill gas or digester gas.
- The requirement pertains to emission limits or operating limits, or is a prescribed means of compliance with them.
- The requirement pertains to CMS, CEMS, or CPMS.

b. **Line #1 Emergency Generator (Em. Unit ID: ESDG12).** This compression ignition (CI) RICE was constructed in 1998 and is rated at 587-bhp. The engine is an *Existing stationary RICE* since it meets the horsepower and construction date criteria in §63.6590(a)(1)(i). Since this engine is an existing emergency stationary RICE with a site rating of more than 500-bhp located at a major source of HAP emissions, it does not have to meet the requirements of Subpart ZZZZ and of Subpart A to Part 63 (including initial notification requirements), which is determined in accordance with §63.6590(b)(3)(iii). Therefore, for ESDG12, no permit conditions have been written from Subpart ZZZZ.

c. **Line #2 Emergency Generator (Em. Unit ID: ESDG13).** This compression ignition (CI) RICE was constructed in 2004 and is rated at 610-bhp. The engine is a *New stationary RICE* since it meets the horsepower and construction date criteria in §63.6590(a)(2)(i). Since this engine is a new emergency stationary RICE with a site rating of more than 500-bhp located at a major source of HAP emissions, it does not have to meet the requirements of Subpart ZZZZ and of Subpart A to Part 63 except for the initial notification requirements in §63.6645(f), which is determined in accordance with §63.6590(b)(1) and §63.6590(b)(1)(i). The applicable initial notification requirement of §63.6645(f) has been set forth as permit condition 9.5.2.

State rule 45CSR34 is cited with each applicable Subpart ZZZZ requirement set forth in the renewal operating permit.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. **40 C.F.R. Part 64 – Compliance Assurance Monitoring.** One or more of the following characteristics of the permittee’s emission units make the emission units, on a pollutant-specific basis, not subject to CAM.
 - a. The emission unit emits particulate matter and such emissions are subject to 40 C.F.R. 60 Subpart PPP.
 - b. The emission unit emits particulate matter or formaldehyde, and such emissions are subject to 40 C.F.R. 63 Subpart NNN.
 - c. The emission unit emits other criteria pollutant(s) or HAPs in pre-control amounts less than the respective major source threshold.
 - d. The emission unit has no associated control device for the specific pollutant emitted.

2. **45CSR10 to certain sources.** The emission units in the following table are not subject to 45CSR10:

Emission Unit ID	Description of Emission Unit	Rationale for Non-applicability of 45CSR10
ESDG12	Emergency backup generator, diesel IC engine	Internal combustion engines, including gas turbines and emergency generators, are not subject to 45CSR10 as per Director’s verbal guidance.
ESDG13	Emergency backup generator, diesel IC engine	Internal combustion engines, including gas turbines and emergency generators, are not subject to 45CSR10 as per Director’s verbal guidance.
ESFW11	Fire suppression water, diesel IC engine	Internal combustion engines, including gas turbines and emergency generators, are not subject to 45CSR10 as per Director’s verbal guidance.
ESHW15	Hot water heaters (5 units) rated at 75,100 Btu/hr each	Not a “source operation” defined in 45CSR§10-2.19., therefore 4.1. does not apply. Also, exempt from sections 3, and 6 through 8 since less than 10 MMBtu/hr (per 45CSR§10-10.1.).
ESSH15	Space heating natural gas-fired make-up air heat exchanger, 8.525 MMBtu/hr	Not a “source operation” defined in 45CSR§10-2.19., therefore 4.1. does not apply. Also, exempt from sections 3, and 6 through 8 since less than 10 MMBtu/hr (per 45CSR§10-10.1.).
ESSH16	Space heating natural gas-fired make-up air heat exchanger, 7.875 MMBtu/hr	Not a “source operation” defined in 45CSR§10-2.19., therefore 4.1. does not apply. Also, exempt from sections 3, and 6 through 8 since less than 10 MMBtu/hr (per 45CSR§10-10.1.).

3. **40 C.F.R. 60 Subparts K, Ka, and Kb.** These subparts apply to storage tanks of certain sizes constructed, reconstructed, or modified during various time periods. Subpart K applies to petroleum liquids storage tanks constructed, reconstructed, or modified after June 11, 1973, and prior to May 19, 1978, and Subpart Ka applies to those constructed, reconstructed, or modified after May 18, 1978, and prior to July 23, 1984. Both Subparts K and Ka apply to storage tanks with a capacity greater than 40,000 gallons. Subpart Kb applies to volatile organic liquid (VOL) storage tanks constructed, reconstructed, or modified after July 23, 1984 with a capacity equal to or greater than 75 m³ (~19,813 gallons). All storage tanks at the Inwood facility have a capacity less than 75 m³. Therefore, Subparts K, Ka, and Kb do not apply to the storage tanks at the Inwood facility.
4. **40 C.F.R. 60 Subpart CC – Glass Manufacturing Plants.** This subpart applies to glass melting furnaces constructed after June 15, 1979. This subpart does not apply to furnaces that produce less than 4.55 Mg (5 tons) of glass per day and all-electric melters. An all-electric melter is a melting furnace in which all of the heat is provided by electric current, although some fossil fuel may be charged to the furnace as raw material only. The furnaces at the Inwood facility qualifies as all-electric melters and therefore Subpart CC does not apply.
5. **40 C.F.R. 60 Subpart IIII – Stationary Compression Ignition Internal Combustion Engines.** This subpart applies to manufacturers, owners, and operators of stationary compression ignition internal combustion engines (ICE) that have been constructed, reconstructed, or modified after various dates, the earliest of which is July 11, 2005. All three diesel fired engines at the facility were in use on site prior to 2004. Therefore, NSPS Subpart IIII does not apply to the ICE at the Inwood facility.
6. **40 C.F.R. 60 Subpart JJJJ – Stationary Spark Ignition Internal Combustion Engines.** This subpart applies to manufacturers, owners, and operators of stationary spark ignition internal combustion engines (ICE) that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All of the engines at the Inwood facility, including emergency generators, are compression ignition IC engines, and therefore the requirements of this subpart do not apply.
7. **40 C.F.R. 61 Subpart N – Inorganic Arsenic Emissions from Glass Manufacturing Plants.** This NESHAP applies to glass melting furnaces that use commercial arsenic as a raw material. Since the Inwood facility does not use any arsenic as a raw material this subpart does not apply.
8. **40 C.F.R. 63 Subpart Q – Industrial Process Cooling Towers.** This NESHAP-MACT applies to industrial process cooling towers that remove heat from any chemical or industrial process as well as any combination of heating, ventilation, or cooling systems that uses chromium in the recirculating water as part of the system's water treatment. This requirement does not apply to the Inwood facility. If at any time Guardian becomes subject to this requirement the proper notifications will be performed and records kept.
9. **40 C.F.R. 63 Subpart HHHH – Wet-formed Fiberglass Mat Production.** This NESHAP-MACT applies to drying and curing ovens at wet-formed fiberglass mat production facilities. Guardian's Inwood facility is a wool-fiberglass production facility that produces insulation whereas the wet-formed fiberglass is a material used in the manufacture of asphalt roofing products (shingles and rolls). Therefore, Subpart HHHH does not apply to the Inwood facility.

10. **40 C.F.R. 63 Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters.** This NESHAP-MACT standard applies to industrial, commercial, and institutional boilers and process heaters of various sizes and fuel types at major sources of HAP emissions. Guardian’s Inwood facility is considered a major source for HAP. The recently finalized rule, effective April 1, 2013, includes exemptions for hot water heaters, which includes units heating water (not steam), rated at less than 1.6 MMBTU/hr. The water heater (Em. Unit ID: ESWH15) at the Inwood facility qualify for this exemption. The air makeup units are used to heat the manufacturing building and not used for process heat or steam and, therefore, are not subject to Subpart DDDDD. Based on these exemptions, there are no units at the Inwood facility subject to Subpart DDDDD.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: August 5, 2013
Ending Date: September 4, 2013

Point of Contact

All written comments should be addressed to the following individual and office:

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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

No comments were received from either the public or U.S. EPA.