

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-03900011-2014**

Application Received: **June 13, 2013**

Plant Identification Number: **03-054-03900011**

Permittee: **Clearon Corporation**

Facility Name: **South Charleston Chlorinated Dry Bleach Plant**

Mailing Address: **95 MacCorkle Avenue, South Charleston, WV 25303**

Revised: N/A

Physical Location: South Charleston, Kanawha County, West Virginia
UTM Coordinates: 438.4 km Easting • 4,246.6 km Northing • Zone 17
Directions: Exit 56 (Montrose Drive) on I-64. Turn right and go to the bottom of the hill and turn left at the light onto MacCorkle Avenue (Route 60). Go to 3rd stop light and turn right. Turn left at first driveway.

Facility Description

Clearon's primary products are purified cyanuric acid and chlorinated isocyanurates also known as CDB. The facility operates on a year-round basis, 24 hours per day, and 365 days per year.

Cyanuric acid is produced from the pyrolysis of urea. The cyanuric acid is used as the feed stock to produce various types of CDB's at the South Charleston Plant. CDB's are produced by chlorinating the cyanuric acid. Cyanuric acid is also sold to other manufacturers for the production of their chlorinated dry bleaches or as CDB stabilizers.

Cyanuric acid and chlorinated dry bleaches are used in production of swimming pool treatment chemicals, cleansers, dishwashing detergents and various other products whose primary functions are cleaning, disinfecting, and sanitizing.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2012 Actual Emissions
Carbon Monoxide (CO)	44.5	8.588
Nitrogen Oxides (NO _x)	407.9	54.15
Particulate Matter (PM _{2.5})	56.4	27.132
Particulate Matter (PM ₁₀)	56.4	27.132
Total Particulate Matter (TSP)	56.4	27.132
Sulfur Dioxide (SO ₂)	6.4	1.845
Volatile Organic Compounds (VOC)	7.0	0.646

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2012 Actual Emissions
Chlorine	8.8	5.252
Regulated Pollutants other than Criteria and HAP	Potential Emissions	2012 Actual Emissions
H ₂ SO ₄	180	Not available

According to technical correspondence dated 3/27/2014, the facility has the potential to emit 82,563 metric tons of CO₂e. The PTE of greenhouse gases are: 90,913 tpy of CO₂; 2.8 tpy of methane; and 2.10 tpy of N₂O.

Actual emissions were transcribed from the 2013 Certified Emissions Statement Invoice, and represent emissions from January 1, 2012 through December 31, 2012.

This facility does not have the potential to emit equal to or greater than 100,000 tons per year of carbon dioxide equivalent (CO₂e) and 100 tons per year of greenhouse gases (GHGs) on a mass basis.

Title V Program Applicability Basis

This facility has the potential to emit 407.9 TPY of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Clearon Corporation 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 and Opacity Standards for Indirect Fuel Burning Units
	45CSR6	Open burning prohibited.
	45CSR7	PM and Opacity Standards for Manufacturing Processes
	45CSR10	Standards for Sulfur Dioxide

45CSR11 45CSR13 45CSR16 WV Code § 22-5-4 (a) (14)	Standby plans for emergency episodes. Permits for construction/modification New Source Performance Standards The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR30 45CSR34 40 C.F.R. 60 Subpart Dc 40 C.F.R. 60 Subpart IIII 40 C.F.R. Part 61 40 C.F.R. 63 Subpart ZZZZ 40 C.F.R. Part 82, Subpart F	Operating permit requirement. Emission Standards for HAPs NSPS for Small Steam Generating Units NSPS for Compression Ignition Engines Asbestos inspection and removal RICE MACT Ozone depleting substances
State Only: 45CSR4	No objectionable odors.

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	Affected Permit Section	Permit Determinations or Amendments That Affect the Permit (if any)
R13-0894	10/6/86	8.0	
R13-1698	3/18/94	9.0	
R13-1724A	7/17/03	10.0	
R13-1922A	1/28/03	4.0	
R13-2050F	9/15/08	5.0, 6.0, 7.0, 11.0	
R13-2597	10/25/04	4.0	
R13-2931	7/23/12	11.0	
G60-C045	6/11/12	11.0	

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," which may be downloaded from DAQ's website.

Determinations and Justifications

- I. **45CSR13, Permit No. R13-2931.** This NSR permit was issued for the construction of a 157-hp emergency generator (Em. Unit ID: EG-514) used to provide back-up power for the plant's computer network and phone system located in Building 514. The unit is a 4-stroke compression ignition (CI) type engine that combusts #2 diesel fuel. According to the Engineering Evaluation for this permit there is no air pollution control device utilized for EG-514. The permittee concurred¹ that there are no control devices utilized for EG-514. The table below lists each NSR permit requirement and how it is incorporated into the Title V permit. Since the conditions of this permit pertain only to EG-514, it will be specified after the citation of authority for the permit conditions where it is not already specified in the language of the requirement.

Applicability of 40 C.F.R. 63 Subpart ZZZZ

The facility is an area source of HAP emissions per §63.6585(c). Engine EG-514 meets the affected source criteria of a *New stationary RICE* in §63.6590(a)(2)(iii). EG-514 does not meet any of the criteria in §§63.6590(b)(1),(2), or (3) for RICE subject to limited requirements. Engine EG-514 does meet the criteria of §63.6590(c)(1), and will therefore meet the requirements of MACT Subpart ZZZZ by meeting the applicable requirements of NSPS Subpart IIII. No further Subpart ZZZZ requirements apply to EG-514. Therefore, 40 C.F.R. 63 Subpart ZZZZ is applicable to the engine. Permit R13-2931 sets forth NSPS Subpart IIII requirements for EG-514. Thus, where each NSPS Subpart IIII requirement is incorporated into the renewal permit, the applicable Subpart ZZZZ requirement (i.e., 40 C.F.R. §§63.6590(c) and (c)(1)) will be cited as well. 45CSR34 is cited since 40 C.F.R. 63 Subpart ZZZZ is applicable and is not among the exceptions listed in 45CSR§34-4.

Incorporation of Applicable Requirements into the Title V Permit

As mentioned above, the table below lists the conditions of the NSR permit, the corresponding Title V condition, and discusses how the requirement is incorporated into the renewal operating permit.

R13-2931	Title V	Discussion
4.1.1.	11.1.2.	The requirement is written verbatim in the Title V permit.
4.1.2.	11.1.3.	The requirement is written verbatim in the Title V permit.
4.1.3.	11.1.4.	The requirement is written verbatim in the Title V permit.
4.1.4.	None	This requirement is not applicable since EG-514 is not equipped with a catalytic reduction control device. Furthermore, the engine is not a rich-burn natural gas compressor engine; lean-burn natural gas compressor engine; and is not fitted with an automatic air/fuel ratio controller. Therefore, none of the requirements in this underlying condition are applicable and thus it is not included in the Title V permit.
4.2.1.	None	This requirement is not applicable since EG-514 is not equipped with a catalytic reduction control device.
4.3.1.	None	This underlying requirement states "See Facility-Wide Testing Requirements Section 3.3." The operating permit contains a facility-wide testing subsection; therefore, no other condition is warranted for this underlying permit reference condition.
4.4.1.	11.4.2.	The requirement is written in the Title V and only the references to condition numbers are modified for coherence in the Title V permit.

¹ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

R13-2931	Title V	Discussion
4.5.1.	None	This underlying requirement states “See Facility-Wide Reporting Requirements in Section 3.5.” Since facility-wide reporting requirements in the Title V permit cover all five of the requirements in subsection 3.5. of permit R13-2931, there is no need to include this specific NSR permit term.
5.1.1.	11.1.5.	The requirement is written verbatim in the Title V permit.
5.1.2.	11.1.6.	The requirement is written verbatim in the Title V permit.
5.1.3.	11.1.7.	The requirement is written verbatim in the Title V permit.
5.1.4.	11.1.8.	The requirement is written verbatim in the Title V permit.
5.1.5.	11.1.9.	The requirement is written verbatim in the Title V permit.
5.1.7. ²	11.1.10.	The requirement is written verbatim in the Title V permit.
5.1.8.	11.1.11.	The requirement is written verbatim in the Title V permit.
5.1.9.	11.1.12.	The requirement is written in the Title V permit and the language “this section” is changed to “§60.4208”.
5.1.10.	11.1.13.	The requirement is written in the Title V permit and the language “this section” is changed to “§60.4209”.
5.1.11.	11.1.14.	The requirement is written verbatim in the Title V permit.
5.1.12.	None	The requirement for a backpressure monitor for a diesel particulate filter is not applicable to the engine EG-514 since it is not equipped with a control device.
5.1.13.	11.1.15.	The requirement is written verbatim in the Title V permit.
5.1.14.	11.1.16.	The requirement is written verbatim in the Title V permit.
5.1.15.	11.1.17.	The requirement is written in the Title V permit but the language is revised to reflect the current regulation language of §60.4211(f).
5.2.	11.3.1.	The requirement is written verbatim in the Title V permit.
5.2.1.	11.3.2.	The requirement is written verbatim in the Title V permit.
5.2.2.	11.3.3.	The requirement is written verbatim in the Title V permit.
5.2.3.	11.3.4.	The requirement is written verbatim in the Title V permit.
5.2.4.	11.3.5.	The requirement is written in the Title V permit and the language “this section” is changed to “§60.4212”. 45CSR16 is added to all citations of authority.
5.3.1.	11.4.3.	The requirement is written in the Title V permit and references to appropriate condition numbers have been added.
5.3.2.	3.4.1.	This requirement is identical to boilerplate condition 3.4.1. Therefore, the NSR permit requirement is cited for 3.4.1. and is limited by specifying its applicability to EG-514.
5.3.3.	11.4.4.	The requirement is written verbatim in the Title V permit.
5.3.4.	3.4.2.	This requirement is essentially identical to boilerplate condition 3.4.2. Therefore, the NSR permit requirement is cited for 3.4.2. and is limited by specifying its applicability to EG-514.
5.3.5.	11.5.1.	This reporting requirement is written in the Title V permit. The “standards set forth in this Section” pertain to section 5.0 of the NSR permit. The standards that have associated performance testing have been specified by the Title V condition number at the end of this condition.
5.3.6.	3.5.1.	This condition is essentially the same as boilerplate condition 3.5.1. Therefore, this NSR requirement is cited with 3.5.1.

² Note that there is no condition 5.1.6. in permit R13-2931.

R13-2931	Title V	Discussion
5.3.7.	11.5.2.	This condition is written in the Title V permit. The language “this subpart” is changed to “40 C.F.R. 60 Subpart III”.
5.3.8.	None	This recordkeeping requirement is not applicable since the engine is not equipped with a diesel particulate filter.
Appendices A and B; and Cert. of Data Accuracy	Appendix A	The NSR permit contains appendices A and B followed by a Certification of Data Accuracy. All three of these forms have been included in the renewal Title V as Appendix A.

- II. **45CSR13, Permit No. G60-C045.** This NSR general permit pertains to an emergency generator identified by emission unit ID EG-200. This compression ignition (CI) engine is rated at 1,474-bhp and was installed in September 2012 as a replacement of the 1,310-hp engine that was installed in 1976 (and listed in the current operating permit). According to the general permit, the engine is subject to 40 C.F.R. 60 Subpart III.

Applicability of 40 C.F.R. 63 Subpart ZZZZ

The facility is an area source of HAP emissions per §63.6585(c). Engine EG-200 meets the affected source criteria of a *New stationary RICE* in §63.6590(a)(2)(iii). EG-200 does not meet any of the criteria in §§63.6590(b)(1),(2), or (3) for RICE subject to limited requirements. Engine EG-200 does meet the criteria of §63.6590(c)(1), and will therefore meet the requirements of MACT Subpart ZZZZ by meeting the applicable requirements of NSPS Subpart III. No further Subpart ZZZZ requirements apply to EG-200. Therefore, 40 C.F.R. 63 Subpart ZZZZ is applicable to the engine. The general permit applies NSPS Subpart III requirements to the engine. Thus, where each NSPS Subpart III requirement is incorporated into the renewal permit, the applicable Subpart ZZZZ requirement (*i.e.*, 40 C.F.R. §§63.6590(c) and (c)(1)) will be cited as well. Also, 45CSR34 is cited since 40 C.F.R. 63 Subpart ZZZZ is applicable and is not among the exceptions listed in 45CSR§34-4.

Incorporation of Applicable Requirements into the Title V Permit

The registration provides specific hourly and annual mass rate emission limits for NO_x, CO, SO₂, and PM, which are incorporated into the permit. MRR required to demonstrate compliance with these limits are also written in the renewal Title V permit. The requirements are incorporated into the renewal operating permit as follows:

- a. The emission limits from the registration are included in the permit as condition 11.1.18.
- b. The applicable sections 5 and 7 of G60-C are IBR in the permit as condition 11.1.19. Since this requirement specifies that EG-200 is subject to 40 C.F.R. 60 Subpart III, and compliance with this NSPS is the means of meeting the requirements of MACT Subpart ZZZZ, the MACT citation is also included.
- c. Monthly fuel consumption records required by G60-C, condition 5.4.1., are included in the permit as condition 11.4.5. 45CSR§30-5.1.c. is cited to establish the 12-month rolling total as the method of demonstrating compliance with the annual limitations.
- d. Monthly records of the hours of operation of EG-200 are included in the permit as condition 11.4.6. to demonstrate that the unit does not exceed the implicit 500 hours per year operating limit for continued qualification for the emergency generator permit G60-C. Further, these records are necessary to demonstrate compliance with the emission limits in 11.1.18. 45CSR§30-5.1.c. is cited to establish the 12-month rolling total as the method of demonstrating compliance with the 500 hr/yr operating limitation.

- e. Other associated G60-C monitoring, testing, recordkeeping, and reporting requirements in G60-C are IBR in conditions 11.2.1., 11.3.6., 11.4.7., and 11.5.3., respectively.

III. **40 C.F.R. 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.** Subpart ZZZZ 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. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

The applicability of this regulation is discussed above for engines EG-200 and EG-514. However, the remaining engines EG-100 and EG-400 must be evaluated to determine applicability of Subpart ZZZZ to them. According to Attachments E of the application, the following table lists the pertinent criteria that characterize each engine:

Emission Unit ID	EG-100	EG-400
Function	Emergency electric generator	Emergency electric generator
Ignition type	Compression ignition (CI)	Compression ignition (CI)
Design capacity	1,340 hp	745 hp
Maximum operating schedule	500 hr/yr	500 hr/yr
Installation Date	1997	1991
Control Device	None	None

Even though Attachment E of the renewal application states the maximum operating schedule is 8,760 hours per year, it was determined from the language of permit R13-2050F, condition A.15. (Title V condition 11.1.1.), that EG-100 is an emergency type generator since it is called an emergency generator and the pollutant limitations are based upon operating 500 hours per year.

Attachment E of the renewal application states the maximum operating schedule is 8,760 hours per year for engine EG-400. However, technical correspondence³ from the permittee stated that EG-400 is used only in the event of an emergency, and the maximum usage is 500 hours per year.

The facility is an area source of HAP, and by using the stated horsepowers and installation dates, both engines are *Existing stationary RICE* pursuant to §63.6590(a)(1)(iii). Neither engine meets the criteria in §63.6590(b) for *Stationary RICE subject to limited requirements* since they are existing; are located at an area source of HAP; and are compression ignition type. Also, neither engine meets the criteria in §63.6590(c) for *Stationary RICE subject to Regulations under 40 CFR Part 60* since they are existing.

Table ZZZZ below sets forth the sections of Subpart ZZZZ and discusses how applicable requirements are incorporated into the renewal operating permit, as well as specifying why certain sections of Subpart ZZZZ are not applicable to the engines EG-100 and EG-400.

³ E-mail dated 2/12/2014 received from Heather Walker, Environmental Engineer for the permittee.

Table ZZZZ

Section	Condition	Discussion
Compliance Date		
§63.6595(a)(1)	11.1.20.	Each affected engine is considered “an existing stationary CI RICE located at an area source of HAP emissions.” The compliance date is May 3, 2013, in accordance with this section. Therefore, the permittee must be in compliance with Subpart ZZZZ at the time of writing this renewal permit.
§§63.6595(a)(2)-(7)	None	These sections are not applicable since the units are existing.
§63.6595(b)	None	At this renewal there is no indication the facility will become a major source of HAP; therefore, a permit condition for this section is not necessary.
§63.6595(c)	None	This section would be cited with any specific applicable requirements from §63.6645. However, none of the requirements in §63.6645 are applicable; therefore, this section is not cited in any condition in the permit.
Emission and Operating Limitations		
§63.6600	None	This section is not applicable since the facility is an area source of HAP.
§63.6601	None	This section is not applicable since the facility is an area source of HAP.
§63.6602	None	This section is not applicable since the facility is an area source of HAP.
§63.6603(a)	11.1.21. None	<p>Since the engines are existing stationary RICE at an area source of HAP, requirements in this section potentially apply. Specifically, this section requires compliance with the applicable requirements in Table 2d to Subpart ZZZZ and operating limitations in Table 2b of Subpart ZZZZ.</p> <p><u>Table 2d</u> In Table 2d, item #4 pertaining to emergency stationary CI RICE is applicable. This item specifies the intervals for the required oil changes, air cleaner inspections, and hose and belts inspections.</p> <p><u>Table 2b</u> None of the criteria in Table 2b apply to EG-100 and EG-400. Therefore there is not a permit condition for this table.</p>
§63.6603(b)	None	<p>The engines are existing stationary CI RICE with a site rating of more than 300 hp located at an area source of HAP.</p> <p>§63.6603(b)(1) is not applicable since the facility is not located in Alaska.</p> <p>§63.6603(b)(2) applies to stationary RICE located at an area source of HAP that meets paragraphs (b)(2)(i), (ii), and (iii) of §63.6603.</p> <p>Neither §63.6603(b)(2)(i) nor §63.6603(b)(2)(ii) apply since the facility is not located in Alaska. The generating capacity of the RICE is immaterial since all three criteria must be met for the</p>

Section	Condition	Discussion
		<p>exemption under §63.6603(b)(2) to be applicable. This was determined since the word “and” is used, as opposed to “or”.</p> <p>Therefore, the exemption and management practices of this section are not applicable and no permit condition is warranted.</p>
§63.6603(c)	None	This section is not applicable since the engines are not on an offshore vessel.
§63.6603(d)	None	This section is not applicable since the engines are not certified to the Tier 1 or Tier 2 emissions standards in Table 1 of 40 C.F.R. §89.112 and are not subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018.
§63.6603(e)	None	This section is not applicable since the engines are not certified to the Tier 3 emissions standards in Table 1 of 40 C.F.R. §89.112.
§63.6603(f)	None	This section is not applicable since the engines are not spark ignition type.
§63.6604(a)	None	This section is not applicable since the engines are emergency type.
§63.6604(b)	11.1.27.	This section is applicable since each unit “uses diesel fuel and operates”.
§63.6604(c)	None	This section is not applicable since the engines are not located at a major source of HAP.
§63.6604(d)	None	This section is not applicable since the engines are not located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, Alaska, or on an offshore vessel.
General Compliance Requirements		
§63.6605(a)	None	This section is not applicable since the engines are not subject to emission limitations and operating limitations of Subpart ZZZZ.
§63.6605(b)	11.1.22.	This general duty requirement is included in the permit.
Testing and Initial Compliance Requirements		
§63.6610	None	This section is not applicable since the engines are not located at a major source of HAP.
§63.6611	None	This section is not applicable since the engines are existing CI RICE and are located at an area source of HAP.
§63.6612	None	<p>This section is applicable since the engines are existing stationary RICE at an area source. However, no specific requirements in §63.6612 apply to them, as is demonstrated below.</p> <p>§63.6612(a) refers to applicable requirements in Table 4 to Subpart ZZZZ. Rows 1 and 3 of Table 4 can apply to CI stationary RICE and stationary RICE, respectively, which are complying with the requirement to reduce CO emissions or limit formaldehyde or CO in the exhaust. However, the engines are not subject to any Subpart ZZZZ requirement to reduce CO emissions; therefore, §63.6612(a) does not apply.</p> <p>§63.6612(b) applies in the case when testing has already been performed. This requirement is not applicable to the engines.</p>
§63.6615	None	This section is not applicable since the engines are not subject to emission limitations and operating limitations under Subpart ZZZZ.

Section	Condition	Discussion
§§63.6620(a) through (i)	None	This section is not applicable since the engines are 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 engines, and a CEMS is not required by Subpart ZZZZ.
§63.6625(b)	None	This section is not applicable since there is no CPMS for the engines, and a CPMS is not required by Subpart ZZZZ.
§63.6625(c)	None	This section is not applicable since the engines do not fire landfill gas or digester gas.
§63.6625(d)	None	This section is not applicable since the engines are existing CI RICE.
§63.6625(e)	11.1.23.	The engines meet the criteria of §63.6625(e)(3), and are therefore required to comply with this section. The language of both §63.6625(e) and §63.6625(e)(3) have been combined for the permit condition. The non-applicable language “or black start” has not been included in the condition.
§63.6625(f)	11.1.24.	The engines meet the criteria of §63.6625(f), and are therefore subject to the requirement. The non-applicable language “existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions” has not been included in the condition.
§63.6625(g)	None	This section is not applicable since the engines are emergency CI RICE.
§63.6625(h)	11.1.22.	This section is applicable to the engines, and has already been included in the requirements of §63.6603(a), Table 2d, Item #4. Thus, this section is cited along with §63.6603(a) rather than writing a separate and redundant condition.
§63.6625(i)	11.1.25.	The oil analysis program is an option mentioned in footnote 1 to Table 2d of Subpart ZZZZ. The oil analysis program is set forth in a separate permit condition with non-applicable language excluded.
§63.6625(j)	None	This section is not applicable since the engines are not SI RICE.
§63.6630(a)	None	§63.6630(a) is not applicable since the engines are not subject to emission and operating limitations from Subpart ZZZZ, and none of the requirements in Table 5 are applicable.
§63.6630(b)	None	§63.6630(b) is not applicable since the engines are not subject to operating limitations from Subpart ZZZZ.
§63.6630(c)	None	The NOCS requirement of §63.6630(c) is not applicable since none of the requirements in §§63.6630(a) through (b) are applicable.
§63.6630(d)	None	This section is not applicable since the engines are emergency CI RICE.
§63.6630(e)	None	This section is not applicable since the engines are emergency CI RICE.
Continuous Compliance Demonstration		
§§63.6635(a) through (c)	None	§63.6635(a) is not applicable since the engines are not subject to emission and operating limitations from Subpart ZZZZ. §§63.6635(b) and (c) are not applicable since the engines are not subject to any continuous monitoring in Subpart ZZZZ.

Section	Condition	Discussion
§63.6640(a)	11.1.23.	Since the engines are subject to requirements of Table 2d of Subpart ZZZZ, this section requires compliance with applicable methods in Table 6 to Subpart ZZZZ. In Table 6, the requirements of item #9 are applicable to the engines. However, it is the same language as in §63.6625(e). Rather than writing a separate and redundant condition, this section is cited with condition 11.1.23.
§63.6640(b)	11.5.4.	This applicable requirement requires the permittee to report deviations from the applicable requirements of Table 2d to Subpart ZZZZ. Non-applicable language in the regulation has not been included in this permit condition. 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.
§63.6640(c)	None	This section is not applicable since the engines are emergency type.
§63.6640(d)	None	This section is not applicable since the engines are existing.
§63.6640(e)	11.5.5.	This section requires reporting when an applicable requirement in Table 8 to Subpart ZZZZ is not met. The engines do not meet the criteria for an exemption for meeting Table 8 requirements; therefore, a permit condition has been written.
§63.6640(f)	11.1.26.	This section applies to the engines since they are at the time of writing this renewal permit considered emergency stationary RICE. However, certain specific requirements are not applicable (e.g., §63.6640(f)(3)), and are not included in the permit condition. The specific criteria under §63.6640(f)(4)(ii) are IBR.
Notifications		
§63.6645(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. Since the engines meet these criteria, the notifications under §63.6645 do not apply.
§63.6645(b)	None	This section is not applicable since the engines are located at an area source of HAP.
§63.6645(c)	None	This section is not applicable since the engines are existing and are located at an area source of HAP.
§63.6645(d)	None	This section is not applicable since the engines are greater than 500 hp and located at an area source of HAP.
§63.6645(e)	None	This section is not applicable since the engines are 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 engines since no performance tests under Subpart ZZZZ are required.
§63.6645(i)	None	This section is not applicable to the engines since they are emergency type.
Reporting		
§§63.6650(a) and (b)	None	These sections are not applicable to the engines since they meet 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 engines since they meet none of the criteria in Table 7 to Subpart ZZZZ (cf. §63.6650(a)).

Section	Condition	Discussion
§63.6650(d)	None	This section is not applicable since it pertains to Compliance Reports, which are not required for the engines since they meet none of the criteria in Table 7 to Subpart ZZZZ (cf. §63.6650(a)). Furthermore, this section is not applicable since the engines are not subject to emissions and operating limitations from Subpart ZZZZ.
§63.6650(e)	None	This section is not applicable since the engines are not subject to emissions and operating limitations from Subpart ZZZZ.
§63.6650(f)	11.5.6.	This section is an applicable requirement to report deviations (as defined in 40 C.F.R. §63.6675). This requirement is modified for insertion into the permit.
§63.6650(g)	None	This section is not applicable since the engines are existing and do not fire landfill gas or digester gas.
§63.6650(h)	11.5.7.	This reporting requirement is contingent upon operation requirements in condition 11.1.26.; therefore, this reporting requirement is included in the renewal permit.
Recordkeeping		
§63.6655(a)	None	This section does not apply since the engines are 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 engines.
§63.6655(c)	None	This section is not applicable since the engines are existing and do not fire landfill gas or digester gas.
§63.6655(d)	None	This section does not apply since the engines are not subject to emission and operating limitations.
§63.6655(e)	11.4.8.	This section requires recordkeeping of the maintenance conducted to demonstrate that the affected RICE was maintained according to the required maintenance plan. The engines are existing stationary emergency RICE and are located at an area source of HAP being subject to Table 2d management practices; therefore, they meet the criteria of §§63.6655(e)(2) and (3), respectively. Hence, this recordkeeping requirement has been written in the permit. The regulation language “any of the following stationary RICE” in the last sentence has been replaced with the applicable language “an existing stationary emergency RICE.”
§63.6655(f)	11.4.9.	The engines meet the criteria of §63.6655(f)(2); therefore, this section is applicable. The language of both §63.6655(f) and §63.6655(f)(2) have been combined to create one coherent and applicable condition.
§§63.6660(a), (b), and (c)	11.4.10.	These applicable requirements have been written in the permit.

State rule 45CSR34 is cited with each condition in Table ZZZZ since DAQ has adopted the requirements of 40 C.F.R. Part 63, and Subpart ZZZZ is not among the exclusions in 45CSR§§34-4.1.a. through d.

IV. **Technical Review of 40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM).** This regulation provides for monitoring of sources that are (i) subject to an emission limitation; (ii) use a control device to meet the limitation; and (iii) have pre-control device emissions that are equal to or greater than the major source threshold for the pollutant that is not otherwise exempt from CAM. The facility operates a number of sources that are subject to emission limitations while utilizing a control device to meet the limitation. Therefore, each of the sources with emission limits in the permit have been examined to determine if a control device is used to meet the limit, and if so, the pre-control device potential emissions are determined in order to make an applicability determination for CAM. Table 64 below lists the emission units, associated control device, and provides rationale for the non-applicability of CAM to the source. Note that no source was determined to be subject to this regulation.

Table 64

Emission Unit	Control Device	Discussion
H-110 (ST-110 (F-110))	None	The source is not subject to CAM since it does not use an add-on control device and potential emissions are less than major source threshold. Furthermore, low NOx burners are not considered a control device per CAM definition.
H-112 (ST-112)	None	The source is not subject to CAM since it does not use an add-on control device and potential emissions are less than major source threshold. Furthermore, low NOx burners are not considered a control device per CAM definition.
T-151 (ST-176 (F-176))	S-151A (baghouse)	The source is subject to a PM limit (condition 5.1.1.) and uses a baghouse to control the emissions. However, the permittee stated in technical correspondence ⁴ that the pre-control device potential emissions are below the major source threshold. Since the applicability criterion of §64.2(a)(3) is not met CAM is not applicable to the source.
T-191 (ST-176 (F-176))	S-195 (baghouse)	Same rationale as for T-151: the source is not subject to CAM since the applicability criterion of §64.2(a)(3) is not met.
F-101 (ST-130 (F-105))	D-101 (A scrubber) F-104 (A ammonia afterburner)	Em. Pt. ST-130 is subject to a PM limit (cond. 6.1.2.). However, both control devices D-101 and F-104 are for the control of ammonia per their Attachments G. Therefore, a control device is not used to meet the PM limitation, and CAM does not apply to F-101. Additionally, D-101 is considered process equipment that returns urea and cyanuric acid to B Kiln; therefore, it is not a control device per the CAM definition.
F-121 (ST-131 (F-125))	D-121 (B scrubber) F-124 (B ammonia afterburner)	Em. Pt. ST-130 is subject to a PM limit (cond. 6.1.2.). However, both control devices D-121 and F-124 are for the control of ammonia per their Attachments G. Therefore, a control device is not used to meet the PM limitation, and CAM does not apply to F-121. Additionally, D-121 is considered process equipment that returns urea and cyanuric acid to A Kiln; therefore, it is not a control device per the CAM definition.

⁴ E-mail dated 4/16/2014 received from James B. Turley, Environmental Engineer for the permittee.

Emission Unit	Control Device	Discussion
F-161 (ST-171 (F-171))	D-161 (C scrubber) F-164 (C ammonia afterburner)	Em. Pt. ST-171 is subject to a PM limit (cond. 6.1.2.). However, both control devices D-161 and F-164 are for the control of ammonia per their Attachments G. Therefore, a control device is not used to meet the PM limitation, and CAM does not apply to F-161. Additionally, D-161 is considered process equipment that returns urea and cyanuric acid to C Kiln; therefore, it is not a control device per the CAM definition.
F-101 (ST-102 (F-102))	None	ST-102 is subject to an emission limit (cond. 6.1.3.). However, a control device is not utilized; therefore, CAM does not apply.
F-101 (ST-103 (F-103))	None	ST-103 is subject to an emission limit (cond. 6.1.3.). However, a control device is not utilized; therefore, CAM does not apply.
F-121 (ST-122 (F-122))	None	ST-122 is subject to an emission limit (cond. 6.1.3.). However, a control device is not utilized; therefore, CAM does not apply.
F-121 (ST-123 (F-123))	None	ST-123 is subject to an emission limit (cond. 6.1.3.). However, a control device is not utilized; therefore, CAM does not apply.
F-161 (ST-162 (F-162))	None	ST-162 is subject to an emission limit (cond. 6.1.3.). However, a control device is not utilized; therefore, CAM does not apply.
F-161 (ST-163 (F-163))	None	ST-163 is subject to an emission limit (cond. 6.1.3.). However, a control device is not utilized; therefore, CAM does not apply.
T-285	H-204	The tank vents to the H-204 Digestion Barometric Condenser and D-232 Venturi Water Scrubber, both of which meet the definition of <i>Inherent process equipment</i> . As such, the devices are not control devices as defined in §64.1; therefore, the applicability criterion of §64.2(a)(2) is not met and CAM does not apply to the source.
T-275	H-204	Same rationale as for T-285: the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.
T-203	H-204	Same rationale as for T-285: the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.
T-245	H-204	Same rationale as for T-285: the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.
T-230	D-232	Same rationale as for T-285: the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.
T-350	D-232	Same rationale as for T-285: the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.
T-233	D-232	Same rationale as for T-285: the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.

Emission Unit	Control Device	Discussion
T-349	D-222 Packed Bed Scrubber	The control device is for H ₂ SO ₄ , which is a pollutant subject to regulation under section 111 of the CAA. Furthermore, H ₂ SO ₄ is not on the EPA's list of HAPs. Therefore, the 100-tpy threshold for a <i>Major source</i> in §70.2 is utilized to determine if the tank is pre-control major for H ₂ SO ₄ . Based upon post-control PTE (0.70 tpy) and control device efficiency (99%) stated in the application, the pre-control device potential emissions of H ₂ SO ₄ is 70 tpy. Therefore, the tank is not subject to CAM since the applicability criterion of §64.2(a)(3) is not met. The permittee also stated in technical correspondence ⁵ that the pre-control device potential emissions are below the major source threshold.
T-334	D-222 Packed Bed Scrubber	Same rationale as for T-349: the tank is not subject to CAM since the applicability criterion of §64.2(a)(3) is not met.
T-387	D-222 Packed Bed Scrubber	Same rationale as for T-349: the tank is not subject to CAM since the applicability criterion of §64.2(a)(3) is not met.
CE-301, CE -302, CE -321, CE -322, CE -324, & CE -343 Centrifuges	D-222 Packed Bed Scrubber	Same rationale as for T-349: the tank is not subject to CAM since the applicability criterion of §64.2(a)(3) is not met.
T-1204 & T-234 Centrifuge Feed Tanks	D-222 Packed Bed Scrubber	Same rationale as for T-349: the tank is not subject to CAM since the applicability criterion of §64.2(a)(3) is not met.
T-1007	None	The 93% Sulfuric Acid Tank does not utilize a control device; therefore, the tank is not subject to CAM since the applicability criterion of §64.2(a)(2) is not met.
D-336A Process	D-336A Wet Scrubber	The permittee stated in technical correspondence ⁶ that the pre-control device potential emissions are below the major source threshold.
H-904, T-801A, C-975, CU-971, CU-975	C-9040 Baghouse	The permittee stated in technical correspondence ⁷ that the pre-control device potential emissions from each source are below the major source threshold.
SC-909A, SC-909B, SC-910B, T-987, Y-970A, Y-970B	C-9780 Baghouse	The permittee stated in technical correspondence ⁸ that the pre-control device potential emissions from each source are below the major source threshold.
F-831, C-833, C-831	S-832 and S-831 Baghouses	The permittee stated in technical correspondence ⁹ that the pre-control device potential emissions from each source are below the major source threshold.
H-803, C-803, C-802	C-8070 and C-8060 Baghouses	The permittee stated in technical correspondence ¹⁰ that the pre-control device potential emissions from each source are below the major source threshold.

⁵ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

⁶ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

⁷ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

⁸ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

⁹ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

¹⁰ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

Emission Unit	Control Device	Discussion
T-9901, C-9903, DR-9904, H-9907, H-9908, H-9909, T-9908	S-8104 Baghouse	The permittee stated in technical correspondence ¹¹ that the pre-control device potential emissions from each source are below the major source threshold.
EG-100	None	No control device is utilized per the renewal application; therefore, CAM does not apply according to 40 C.F.R. §64.2(a)(2).
EG-200	None	No control device is utilized per the renewal application; therefore, CAM does not apply according to 40 C.F.R. §64.2(a)(2).
EG-400	None	No control device is utilized per the renewal application; therefore, CAM does not apply according to 40 C.F.R. §64.2(a)(2).
EG-514	None	A control device is not utilized per the renewal application; therefore, CAM does not apply according to 40 C.F.R. §64.2(a)(2).

In summary, no emission unit at the facility (at the time of issuance of this renewal operating permit) is subject to 40 C.F.R. Part 64.

V. Miscellaneous Changes

- a. Emission Units Table (Subsection 1.1) – Multiple emission units have been removed and added to the emission units table as provided in Attachment D of the renewal application. The emission units table for the renewal permit reflects the information provided in Attachment D of the renewal application and amendments later received from the permittee. The only sources deleted were the fugitive sources C-194 (Bucket Elevator), T-194 (Unloading Hopper), T-193 (Unloading Pit), C-193 (Screw Feeder), and Y-194 (Scales). These sources were installed in 2008. These sources followed the Urea Dissolution Tank T-191 under Urea/Cyanuric Acid Unloading in the emission units table of the operating permit.
- b. The permittee included the 93% Sulfuric Acid Storage Tank (T-1003) in the renewal application since it had not been included in previous permits. As with T-1007 already included in the permit, T-1003 is subject to 45CSR§7-4.2. Due to the type of acid mist and construction date of the tank, the applicable concentration limit is 35 mg/dscm and is integrated into existing permit condition 7.1.3. by utilizing a separate citation of authority for T-1003 since it is not mentioned in the NSR permit requirement. The corresponding recordkeeping in existing condition 7.4.2. is modified to include T-1003.
- c. Condition 3.1.3. – The citation of 45CSR15 is replaced with 45CSR34 since the former has been repealed and the latter currently adopts NESHAPs requirements.
- d. Condition 3.3.1.d. – This new boilerplate condition has been added for the renewal permit.
- e. Conditions 3.5.3. and 3.5.5. have been modified for the electronic submittals to USEPA.
- f. Condition 4.5.2. – The requirement is modified to refer to the persons and addresses in boilerplate condition 3.5.3.

¹¹ E-mail dated 3/27/2014 received from Heather Walker, Environmental Engineer for the permittee.

- g. For precision, the permit number R13-2597 is added in parenthesis in the first statement of condition 4.1.10.

Non-Applicability Determinations

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

- a. **40 C.F.R. 63 Subpart DDDDD** — *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*. The facility is not a major source of HAP. Therefore, 40 C.F.R. Part 63, Subpart DDDDD does not apply to the boilers H-110 and H-112.
- b. **40 C.F.R. 63 Subpart UUUUU** — *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Utility Steam Generating Units*. The boilers H-110 and H-112 are not coal- or oil-fired units, and are not EGUs as defined in 40 C.F.R. §63.10042.
- c. **40 C.F.R. 63 Subpart JJJJJ** — *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. This regulation applies to an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195. According to §63.11195(e), gas-fired boilers (as defined in the regulation) are not subject to Subpart JJJJJ or to any requirement of the regulation. §63.11237 specifies that a gas-fired boiler includes any boiler that 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. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. According to the renewal application, the boilers combust only natural gas; therefore, boilers H-110 and H-112 meet the definition of gas-fired boiler and are therefore not subject to 40 C.F.R. 63 Subpart JJJJJ.
- d. **40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM)**. None of the sources at the facility meet all of the applicability criteria in 40 C.F.R. §§64.2(a)(1) through (3); therefore, CAM is not applicable to any source at the facility.
- e. **Condition 5.1.12. of Permit No. R13-2931** – This requirement for a backpressure monitor for a diesel particulate filter is not applicable to the engine EG-514 since it is not equipped with a control device.

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: April 24, 2017
Ending Date: May 27, 2014

Point of Contact

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

Denton McDerment, PE
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478
denton.b.mcderment@wv.gov

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)

Not applicable for draft/proposed permits.