West Virginia Department of Environmental Protection  
Division of Air Quality

Fact Sheet

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

Permit Number: R30-03900011-2019
Application Received: December 12, 2018
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

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 feedstock 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.

SIC Code: 2819
## Emissions Summary

### Plantwide Emissions Summary [Tons per Year]

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2017 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>44.54</td>
<td>8.26</td>
</tr>
<tr>
<td>Nitrogen Oxides (NO\textsubscript{X})</td>
<td>407.92</td>
<td>60.00</td>
</tr>
<tr>
<td>Particulate Matter (PM\textsubscript{2.5})</td>
<td>56.42</td>
<td>9.85</td>
</tr>
<tr>
<td>Particulate Matter (PM\textsubscript{10})</td>
<td>56.42</td>
<td>10.74</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>56.42</td>
<td>21.46</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO\textsubscript{2})</td>
<td>6.41</td>
<td>0.27</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>7.00</td>
<td>0.55</td>
</tr>
</tbody>
</table>

*PM\textsubscript{10} is a component of TSP.*

<table>
<thead>
<tr>
<th>Hazardous Air Pollutants</th>
<th>Potential Emissions</th>
<th>2017 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>8.80</td>
<td>6.51</td>
</tr>
</tbody>
</table>

*Some of the above HAPs may be counted as PM or VOCs.*

### Title V Program Applicability Basis

This facility has the potential to emit 407.92 TPY of NO\textsubscript{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 andOpacity Standards for Indirect Fuel Burning Units
  - 45CSR6: Open burning prohibited.
  - 45CSR7: PM and Opacity Standards for Manufacturing Processes
  - 45CSR10: Standards for Sulfur Dioxide
  - 45CSR11: Standby plans for emergency episodes.
  - 45CSR13: Permits for construction/modification
  - 45CSR16: New Source Performance Standards
  - WV Code § 22-5-4 (a) (14): The Secretary can request any pertinent information such as annual emission inventory reporting.
  - 45CSR30: Operating permit requirement.
  - 45CSR34: Emission Standards for HAPs
  - 40 C.F.R. 60 Subpart Dc: NSPS for Small Steam Generating Units
  - 40 C.F.R. 60 Subpart III: NSPS for Compression Ignition Engines
Clearon Corporation

South Charleston Chlorinated Dry Bleach Plant

West Virginia Department of Environmental Protection
Division of Air Quality

40 C.F.R. Part 61  
Asbestos inspection and removal

40 C.F.R. 63 Subpart ZZZZ  
RICE MACT

40 C.F.R. Part 82, Subpart F  
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

<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13-0894</td>
<td>10/6/86</td>
<td></td>
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<tr>
<td>R13-1698</td>
<td>3/18/94</td>
<td></td>
</tr>
<tr>
<td>R13-1724A</td>
<td>7/17/03</td>
<td></td>
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<tr>
<td>R13-1922A</td>
<td>1/28/03</td>
<td></td>
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<tr>
<td>R13-2050H</td>
<td>9/13/17</td>
<td></td>
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<tr>
<td>R13-2597</td>
<td>10/25/04</td>
<td></td>
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<tr>
<td>R13-2931</td>
<td>7/23/12</td>
<td></td>
</tr>
<tr>
<td>G60-C045</td>
<td>6/11/12</td>
<td></td>
</tr>
</tbody>
</table>

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

Emission Units Table Updates
Several minor updates were made to the emission units table. They are as follows:

- The design capacity for Emission Unit ID F-1801 was changed from 14.8 MMBtu/hr to 13.65 MMBTU/hr to correct an error in previous versions of the permit. This also required a change to condition 6.1.3.
- Emission Unit CE-323 is a centrifuge that had been previously labeled as “not in service”. This notation was removed from the emission unit description. The installation date and design capacity were also updated.
The installation dates and/or design capacities were updated for four additional centrifuges (Emission Unit IDs: CE-734, CE-733, CE-732, and CE-731).

The Chilsonator Feed Bin (Emission Unit ID: T-801A) installation date was updated.

The installation dates and design capacities were revised for two surge tanks (Emission Unit IDs: T-914 and T-915).

The installation date for the Acid Storage Tank: HCL 36% (Emission Unit ID: T-7825) was updated.

The installation date for Emission Unit ID T-700C was updated.

The emission unit description for Emission Unit T-769 previously stated “CDB 90 Scrap Recovery”. The permittee stated that T-769 is used for both CDB-90 and CDB-56 scrap recovery, therefore the description was revised to read “CDB Scrap Recovery”. The installation date was also updated.

The Chilsonator Feed Bins’ emission unit ID was revised to say “T-801”. It was erroneously listed as “T-801A” in the previous permit. Additionally, the installation date was also updated.

The installation date for the Surge Tank (Emission Unit ID: T-987) was updated.

The installation dates were updated for the Centrifuge Feed Tank, Neutralization Tank, Head Tank, and Repulp Tank (Emission Unit IDs: T-7804, T-7820, T-7805, and T-7819).

The design capacity and installation date were updated for the Sodium Bisulfate Storage (Emission Unit ID: T-7821B).

The retired High pH Waste Treatment Feed Tank (Emission Unit ID: T-7812A) was renamed and placed into service to replace the Surge Tank (Emission Unit ID: T-7806), which was found to be at the end of its useful life. The current configuration was given new Emission Unit ID T-7814.

The CDB 56 Scrap Recovery Tank (Emission Unit ID: T-767A) has been removed from the facility, therefore it was removed from the Emission Units Table.

General Permit G60-D

General Permit Registration G60-C045 was issued for the 1,474 HP Caterpillar C32 Emergency Diesel Generator, which was installed in 2012. This general permit registration referenced Class II Emergency Generator General Permit G60-C, which was previously included in Appendix B. G60-C has been revised, and the current version of this general permit is G60-D. Appendix B has been removed with this renewal, and the applicable conditions of G60-D were included in the body of the permit, rather than including the entire general permit as an appendix. This required minor revisions and additions to the permit and updates to several regulatory citations.

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 JJJJJJ — 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 JJJJJJ 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 JJJJJJ.

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**

<table>
<thead>
<tr>
<th>Beginning Date:</th>
<th>Friday, February 22, 2019</th>
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<tbody>
<tr>
<td>Ending Date:</td>
<td>Monday, March 25, 2019</td>
</tr>
</tbody>
</table>

**Point of Contact**

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

Rex Compston, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV  25304
Phone: 304/926-0499 ext. 1209  •  Fax: 304/926-0478
Rex.E.Compston@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)**

After submission to the EPA for review, the address to send reports to EPA Region III was updated in condition 3.5.3. of the draft/proposed permit renewal.