

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on April 9, 2019.

Permit Number: **R30-03900011-2019**

Application Received: **March 1, 2019**

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**

Permit Action Number: *MM01* Revised: *July 16, 2019*

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 under SIC Code 2819.

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.

The purpose of this modification is to increase production of CDB-90 by replacing and adding tanks, upgrading process and associated equipment, adding and replacing packaging stations, and adding and replacing sizing screens. These changes were approved under R13-1698A.

Emissions Summary

Change in Plantwide Emissions Summary [Tons per Year]	
Regulated Pollutants	Change in Potential Emissions
Carbon Monoxide (CO)	+2.00
Nitrogen Oxides (NO _x)	+0.81
Particulate Matter (PM _{2.5})	+8.12
Particulate Matter (PM ₁₀)	+8.39
Total Particulate Matter (TSP)	+9.02
Sulfur Dioxide (SO ₂)	+0.01
Volatile Organic Compounds (VOC)	+0.12

PM₁₀ is a component of TSP.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 408.73 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	Particulate matter from manufacturing operations
	45CSR13	NSR permitting
	45CSR30	Operating permit requirement.

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

The following Permits/Consent Orders are affected by this modification:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-1698A	5/14/2019	

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

Emissions Units Table Revisions

The following new emission units were added:

New Emission Unit ID	New Emission Point ID	New Emission Unit Description	Year Installed	Design Capacity	Control Device
<i>CDB-90 Process (TCCA)</i>					
T-434	ST-434	Feed Tank	2019	5,552 gallons	---
I-701	ST-1601 <i>(F-1601)</i>	Filter	2019	188 ft ²	D-336A Scrubber
T-701A		Filter Receiver	2019	317 gallons	
T-701B		Filter Receiver	2019	881 gallons	
T-701C		Moisture Trap	2019	1,480 gallons	
T-7811A		Low pH Waste Treatment Feed Tank	2019	20,000 gallons	
H-903	ST-978 <i>(F-978)</i>	Steam Heater	1964	0.75 MMBTU/hr	C-9780 Baghouse
T-988		Surge Tank	2019	150 ft ³	
Y-971		Packaging Equipment	2019	13,333 pph	
<i>Back End Waste</i>					
T-7813A	ST-1601 <i>(F-1601)</i>	Reactor	2019	11,000 gallons	D-336A Scrubber

The following existing emission units were revised:

Emission Unit ID	Emission Point ID	Emission Unit Description	Summary of Emission Unit Revision
<i>CDB-90 Process (TCCA)</i>			
T-431	ST-431	Feed Tank	New Emission Point ID
T-432	ST-432	Feed Tank	New Emission Point ID
T-433	ST-433	Feed Tank	New Emission Point ID
N/A	ST-1601 <i>(F-1601)</i>	Chlorine Unloading (Chlorine Railcar)	Increased Design Capacity
H-566		Vaporizer	Year Installed Changed to 2019 Increased Design Capacity
I-700		Filter	Revised Design Capacity
T-7812		High pH Waste Treatment Feed Tank	Year Installed Corrected
H-803	ST-1001 <i>(F-1001)</i> (Common Stack with S-831 & S- 832)	Heater	Revised Design Capacity
C-803		Mill	Year Installed Changed to 2019 Increased Design Capacity
C-802		Filter Discharge Screw	Year Installed Changed to 2019 Increased Design Capacity
H-904	ST-904 <i>(F-904)</i>	Steam Heater	Revised Emission Unit Description Revised Design Capacity
CP-975		Chilsonator	Revised Emission Unit ID Increased Design Capacity
CU-971		Granulator	Increased Design Capacity
CU-975		Granulator	Increased Design Capacity
SC-909A	ST-978 <i>(F-978)</i>	Sizing Screen	Revised Design Capacity
SC-909B		Sizing Screen	Revised Design Capacity
SC-910B		Sizing Screen	Removal of "Out of Service" Notation Year Installed Changed to 2019 Revised Design Capacity
Y-970A		Packaging Equipment	Increased Design Capacity
Y-970B		Packaging Equipment	Removal of "Out of Service" Notation Year Installed Changed to 2019 Increased Design Capacity
<i>Back End Waste</i>			
T-7813B	ST-1601 <i>(F-1601)</i>	Reactor	Year Installed Changed to 2019

Summary of Permit Language Changes

- R13-1698 was written in the old NSR permit format. R13-1698A was reformatted into the current NSR permit format. This required renumbering of several existing NSR permit conditions, which required revisions to all citations for R13-1698 in this permit.

- Several existing Title V permit conditions were added to R13-1698A. Therefore, citations for R13-1698 were added to these conditions in the Title V permit.
- The 45CSR7 Hourly Particulate Allowable Emissions and streamlining language in Condition 9.1.2. were increased.
- The maximum production rate for the CDB-90 Process was updated in Condition 9.1.3.
- The emissions limit for particulate matter emitted by emission point ST-904 (F-904) was increased in addition to permit language revisions in condition 9.1.5.
- The emissions limits for emission point ST-1001 (F-1001) were increased in addition to permit language revisions in condition 9.1.6.
- The emissions limit for particulate matter emitted by emission point ST-978 (F-978) was increased in addition to permit language changes in condition 9.1.7.

Non-Applicability Determinations

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

None

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: N/A

Ending Date: N/A

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)

Not applicable.