

Fact Sheet



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

Permit Number: **R30-02900001-2022**
Application Received: **October 1, 2021**
Plant Identification Number: **029-00001**
Permittee: **Cleveland-Cliffs Weirton LLC**
Mailing Address: **100 Pennsylvania Avenue, Weirton, WV 26062**

Physical Location: Weirton, Hancock County, West Virginia
UTM Coordinates: 533.70 km Easting • 4474.50 km Northing • Zone 17
Directions: From US 22 take Exit 2 to WV-2 North to Downtown Weirton. Continue on WV-2 approximately 3 miles. Approaching the 10th traffic light, at Pennsylvania Avenue, turn right into the driveway of the Mill Administration Building.

Facility Description

Cleveland-Cliffs Weirton LLC operates a steel finishing facility that includes a Strip Mill with steel pickling and cold rolling operations, Tin Mill with tempering and electrolytic plating (tin and chrome), Hydrogen Plant, and Boilers. Other operations at the facility include emergency generators, storage tanks, wastewater treatment plants, and support/maintenance shops.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2021 Actual Emissions
Carbon Monoxide (CO)	208.24	112.14
Nitrogen Oxides (NO _x)	231.78	95.94
Particulate Matter (PM _{2.5})	17.16	6.51
Particulate Matter (PM ₁₀)	32.24	15.18
Total Particulate Matter (TSP)	94.47	51.08
Sulfur Dioxide (SO ₂)	2.31	1.45
Volatile Organic Compounds (VOC)	35.55	8.49
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions
Hydrogen Chloride	6.56	3.00
Hexane	6.59	2.39
Chromium	0.46	0.21
Other HAPs	0.22	0.11
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		

Title V Program Applicability Basis

This facility has the potential to emit 208.24 tons per year of Carbon Monoxide and 231.78 tons per year of Nitrogen Oxides. Due to this facility’s potential to emit over 100 tons per year of criteria pollutants, Cleveland-Cliffs Weirton LLC 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 emission limits
	45CSR6	Open burning prohibited.
	45CSR7	Manufacturing sources PM emission limits
	45CSR10	SO ₂ emission limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction Permit Requirement.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR16	Performance Standards for New Stationary Sources
	45CSR30	Operating permit requirement.

45CSR34	HAPs emission standards
40 CFR 60 Subpart Dc	NSPS for small, industrial boilers
40 CFR 60 Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines
40 CFR Part 61	Asbestos inspection and removal
40 CFR 63 Subpart CCC	Steel Pickling – HCl Process MACT
40 CFR 63 Subpart ZZZZ	Reciprocating Internal Combustion Engine MACT
40 CFR 63 Subpart DDDDD	Industrial Boiler MACT
40 CFR 63 Subpart CCCCC	Gasoline Dispensing Facilities MACT
40 CFR 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

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
CO-SIP-C-2003-28	July 30, 2003	
R13-0032C	February 9, 2016	
R13-3075	August 13, 2013	

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

The following changes were included in this Title V renewal:

- Section 1.1 – Emission Units
 - Emission Unit ID 039/4 has been decommissioned and was requested to be removed from the Emission Units Table.
 - The permittee requested that Emission Unit IDs 056/1, 057/1, and 058/1 be combined in the Emission Units Table with a new description as part of this renewal application.
 - Emission Unit ID 078/3 was decommissioned and the number of stacks for the Emission Point ID S322 was lowered from 6 to 2. Also, the number of melting pots was decreased from 3 to 2 and the design capacity was lowered from 15 mmBtu/hr to 10 mmBtu/hr.

- The permittee requested that the word Temper be removed from the “Weirlite Temper Mill” for Emission Unit ID 064/1.
- The permittee requested that the term “Acid Plant” in the Emission Units Table be changed to “HCl Tank Farm.”
- Section 3.0 - Title V Boilerplate
 - Condition 3.5.3 was updated in the Title V Boilerplate.
- Section 4.0 – Indirect Fired Combustion Source Requirements
 - Emission Unit ID 078/3 was removed from this section since it was decommissioned.
 - The permittee requested that the description in Tables 4.1.2 and 4.1.5 be changed to simply state “Jumbo Anneals” instead of “Jumbo Anneals 1-4 (East), 5-8 (Middle), and 9-12 (West)” due to the requested combination and description of these being changed in the Emission Units Table.
 - The permittee requested that condition 4.4.2 include all Jumbo Anneals instead of specified anneals 8, 9, 10, and 11.
- Section 5.0 – Manufacturing Process Source Requirements
 - The permittee requested that the word Temper be removed from the “Weirlite Temper Mill” in the section name and condition 5.1.3.
- Section 10.0 – Emergency Generator Requirements [Cummins Engines (EG-01)]
 - Conditions 10.1.1, 10.1.3, and 10.2.2.a.3 changed as a result of changes to 40 CFR 60 Subpart III.
 - Removed the vacated sections (2)(ii) and (2)(iii) from condition 10.1.4
 - Added reporting requirements of 40 C.F.R. §60.4214(d) as condition 10.5.1.
- Section 11.0 – Emergency Generator Requirements [Caterpillar 3412 Engine]
 - Removed the vacated sections (2)(ii) and (2)(iii) from condition 11.1.5.
 - Added requirements of 40 C.F.R. §63.6640(f)(4)(ii) as condition 11.1.5.3.i.
 - Added reporting requirements of 40 C.F.R. §63.6650(h) as condition 11.5.1.

Non-Applicability Determinations

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

- Civil Consent Decree 5-96-CV-171 – has been terminated in accordance with Section XXXVIII,B. The permittee has certified completion and compliance with all requirements.
- 40 CFR 60, subparts K, Ka, and Kb - The storage tanks associated with the facility are not subject to these subparts because the tanks were not constructed within the time frames.
- 40 CFR 63 Subpart N - NESHAPs for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Continuous chromium electroplating of steel is different

from the chromium electroplating operations regulated in the existing NESHAP standard. Therefore, 40 CFR 63 Subpart N is not applicable to this facility.

- 40 CFR 63 Subpart Q - NESHAP for Industrial Process Cooling Towers. No chromium-based water treatment chemicals are used at the facility.
- 40 CFR 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning. No halogenated solvent cleaning machines exist at the facility.
- 40 CFR Part 63, Subpart JJJJJ (Boiler GACT) - Permit R13-0032C was issued to remove the HCl Acid Regeneration Units 1, 2, 3 and 4 which have been permanently shut down. The facility is now designated as an Area Source for hazardous air pollutants (HAPs). This designation allows the Jumbo Anneals, Continuous Annealing lines, Anode Pots, and natural gas fired comfort heating equipment to become subject to the area source boiler MACT, 40 CFR 63, Subpart JJJJJ, however 40 CFR §63.11195(e) exempts gas-fired boilers.
- A Permit Determination form dated December 10, 2002, and received by this Office on December 12, 2002 was submitted for the installation of a Polymer coating line. No permit was required based on information received in the Permit Determination form.
- Hydrogen Reforming Facility - The Methane Hydrogen Reformer was constructed in 1995 by BOC Gases Division after a Rule 13 permit determination deemed that no permit was necessary. In April 2009, ownership was transferred to ArcelorMittal Weirton, Inc. Since there are no applicable requirements on this equipment, it was not included in the Title V permit.
- 40 CFR Part 64 - Compliance Assurance Monitoring - The Tandem Mills and the Chrome and Tin Plating Lines have PM emission limitations but no PM control devices. The control devices are for VOC emissions but there are no VOC emissions limitations for these sources, therefore these sources do not meet the applicability requirements of 40 CFR §§ 64.2(a)(1) and (2).

The HCl Storage Tanks, Lime Storage Silo and Roll Shot Blasters are not major sources and do not meet the applicability requirement of 40 CFR § 64.2(a)(3).

The No. 5 Pickling Line is subject to 40 CFR part 63 Subpart CCC and is exempt from CAM in accordance with 40 CFR § 64.2(b)(1)(i).

There are no control devices associated with the boilers or emergency generators. These and all other emission sources have no control devices and do not meet the applicability requirements of 40 CFR § 64.2(a)(2).

- 40 CFR 68 Risk Management Plans - The facility stores liquefied hydrogen, but engineering controls are in place to limit the amount of hydrogen stored to less than RMP threshold amounts, <10,000 lbs for a flammable substance. The rule does not apply at this time. An RMP Plan would be developed if thresholds are triggered for an applicable chemical.

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: June 28, 2022

Ending Date: July 28, 2022

Point of Contact

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

Nikki B. Moats
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41282
Nikki.b.moats@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)

No comments were received.