

Fact Sheet



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

Permit Number: **R30-00900004-2023**
Application Received: **May 24, 2022**
Plant Identification Number: **03-54-009-00004**
Permittee: **Jupiter Aluminum Corporation**
Facility Name: **Jupiter Coil Coating**
Mailing Address: **8963 River Road, Wellsburg, WV 26070**

Physical Location: Wellsburg, Brooke County, West Virginia
UTM Coordinates: 528.81 km Easting • 4,452.42 km Northing • Zone 17
Directions: The facility is located on the west side of West Virginia State Route 2, immediately south of the village of Beech Bottom.

Facility Description

The Jupiter Coil Coating facility operates two coil coating lines, a natural gas-fired boiler, and two regenerative thermal oxidizers. The facility receives long thin strips of metal rolled into coils. The process for Coil Coating Line #1 includes cleaning the metal strip, applying a primer coat, drying, and quenching then applying a finish coat, drying, quenching, and recoiling. The process for Coil Coating Line #2 includes cleaning the metal strip, applying a coat, drying, quenching, and recoiling. Both processes release volatile organic compounds. Emissions are treated by each line's respective regenerative thermal oxidizer before being discharged into the atmosphere.

The Jupiter Coil Coating plant manufactures coated metal coils under Standard Industrial Classification (SIC) code 3479 and North American Industry Classification System (NAICS) code 332812.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2020 Actual Emissions
Carbon Monoxide (CO)	28.9	5.59
Nitrogen Oxides (NO _x)	34.55	6.66
Particulate Matter (PM _{2.5})	8.16	0.34
Particulate Matter (PM ₁₀)	8.16	2.71
Total Particulate Matter (TSP)	8.16	7.95
Sulfur Dioxide (SO ₂)	0.22	0.04
Volatile Organic Compounds (VOC)	60.42	16.80

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2020 Actual Emissions
Methyl Isobutyl Ketone	1.46	0.16
Isophorone	2.93	< 0.01
Ethylbenzene	1.99*	0.03
Formaldehyde	0.38*	0.04
Cumene	0.47*	0.05
Naphthalene	2.68*	0.18
Xylene	6.87*	0.20
Hexane	0.07	None Reported
Total HAPs	19.85**	0.67

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

The Jupiter Coil Coating facility uses a variety of coatings in order to meet customer demands. For this reason, the potential emissions from each of the coating lines varies depending on the type and amount of coating used. The facility is subject to emission limits for criteria pollutants and for HAPs from each coating line and the coatings are restricted to only contain certain HAPs. In this emissions summary table:

* The potential emissions of speciated HAPs are based on the limits for CCL#1 established in 5.1.13.a. of the operating permit and the potential emission calculations for CCL#2 that were sent in the email dated February 01, 2023.

** The total potential emissions for HAPs are based on the limits established in 5.1.13. of the operating permit for CCL#1 (15.65 tons) and CCL#2 (4.13 tons) plus 0.07 tons of Hexane from Boiler #5.

Title V Program Applicability Basis

Jupiter Aluminum Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30 in accordance with 45CSR§30-3.1.a.3. The facility is subject to 40 C.F.R. Part 63 Subpart SSSS and was a major source of HAPs before the effective date of this subpart.

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	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Open burning prohibited.
	45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	NSR Permits.
	45CSR16	Standards of Performance for New Stationary Sources.
	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 Hazardous Air Pollutants.
	40 C.F.R. Part 60, Subpart TT	Standards of Performance for Metal Coil Surface Coating.
	40 C.F.R. Part 61	Asbestos inspection and removal.
	40 C.F.R. Part 63, Subpart SSSS	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil.
	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

Permit or Consent Order Number	Date of Issuance
R13-2379H	August 11, 2021

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 Jupiter Coil Coating Facility is subject to 40 C.F.R. Part 63 Subpart SSSS and was previously a major source of hazardous air pollutants before the effective date of this subpart. Although the facility no longer meets nor surpasses major source thresholds for HAPs, Jupiter Aluminum Corporation has not reclassified the facility as an area source and has not requested that the Title V Operating Permit become inactive.

The following changes have been made to the current Title V Operating Permit for this renewal:

I. Section 2.0. – General Conditions

- A. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
- B. The authority of Condition 2.22.1. has been updated to 45CSR§30-5.3.e.3.B. due to the repeal of Rule 45CSR38 by Senate Bill No. 163.

II. Section 3.0. – Facility-Wide Requirements

- A. Condition 3.5.3. has been updated to show changes that have been made to the U.S. EPA designee/address.
- B. 45CSR29 has been removed from the list of requirements to which the permit shield applies in Condition 3.7.2. This state rule has been marked as historical and is no longer active.

III. Section 5.1. – Limitations and Standards – Coil Coating Line #1 and Coil Coating Line #2

- A. Condition 5.1.6. of this renewal permit contains the allowable particulate matter emissions from manufacturing processes established through 45CSR§7-4.1. This condition has been updated to account for the increase in maximum throughput of coated metal that was reported in this permit renewal application.
 - a. The requirement of 45CSR§7-4.1. was applied to Coil Coating Line #2 in the facility's initial Title V operating permit (R30-00900004-2002) using a process weight rate of 50,500 lbs/hr (or 606 tons per day). This throughput was used to establish a corresponding particulate matter emission limit of 31.31 lbs/hr. This condition has been carried forward in each permit renewal applicable to Coil Coating Line #2.
 - 1. In the application for R30-00900004-2007, Wheeling Corrugating Company (the owner of the facility until 2012) reported that the throughput of coated metal on Coil Coating Line #2 was 900 tons per day and 328,500 tpy.
 - 2. The current permittee, Jupiter Aluminum Corporation, purchased Coil Coating Line #2 in 2020 and has also reported that the throughput of coated metal is 900 tons per day and 328,500 tpy in the application for this permit renewal.
 - 3. The coating usage, which is the primary source of pollutant emissions from the operations of Coil Coating Line #2, has not been changed since the issuance of the initial permit and remains 38 gallons per hour.
 - b. The application for R30-00900004-2023 reports that the maximum throughput of Coil Coating Line #2 is 328,500 tons of coated metal per year, or 75,000 lbs/hr. Using Table 45-7A for Type 'b' source operations and linear interpolation, the corresponding allowable particulate matter emission rate from Coil Coating Line #2 is 32 lbs/hr. The thermal oxidizer, which controls emissions from the coater, curing oven and quench tank of Coil Coating Line #2, and the chemical dryer 008-2 are

subject to the more stringent particulate matter emission limits established in Condition 5.1.8. of R13-2379H and 5.1.13. of this permit renewal.

- B. The requirement of Condition 5.1.8. of the current operating permit has been removed and replaced with “Reserved.”
- a. In the current operating permit, Condition 5.1.8. prohibits the emission of in-stack sulfur dioxide from exceeding a concentration of 2,000 parts per million by volume and derives its authority from 45CSR§10-4.1. This condition was included in the initial 2002 Title V permit at which time the facility reported a potential-to-emit of 0.44 tpy (880 lbs/yr) of sulfur dioxide. The condition has been carried over with each renewal.
 - b. In the R30-00900004-2023 permit application, the permittee reported a potential-to-emit of 0.22 tpy (440 lbs/yr) of sulfur dioxide. Therefore, via 45CSR§10-4.1.e., this requirement no longer applies as the potential emission of sulfur dioxide from the facility is less than 500 lbs/yr. Should potential emissions of sulfur dioxide from the facility again meet or surpass 500 lbs/yr, the facility will be subject to the applicable requirements of 45CSR10.
- C. To account for the amendments to 40 C.F.R. Part 63 Subpart SSSS, the requirements of Condition 5.1.9. have been replaced with the applicable provisions of 40 C.F.R. §63.5121(a) and Table 1 to Subpart SSSS of Part 63, which describe the operating limits that the permittee must meet. In R30-00900004-2018 (AA01), Condition 5.1.9. contains the minimum average combustion temperature in a 3-hour block average that must be met for Emission Units 4C and CO3. These operating limits were established with the initial performance testing and compliance demonstration requirements of Part 60 Subpart TT and Part 63 Subpart SSSS.
- a. The citation for 40 C.F.R. §60.465(b)(2) has been removed from the authority of this condition. 40 C.F.R. §§60.465(b) and (b)(2) require the initial compliance report to include the combustion temperature used to attain compliance with the applicable VOC emission standards. Since the initial compliance reports for both 4C and CO3 have been received by the DAQ, the references to Condition 5.1.5. of R13-2379H, 45CSR16, and 40 C.F.R. §60.465(b)(2) were removed from the authority of this condition.
 1. The initial performance test for the thermal oxidizer 4C on Coil Coating Line #1 was conducted on April 28, 2021, and the compliance report was received by the DAQ on June 18, 2021. With a VOC destruction/removal efficiency of 98.4% at an average operating temperature of 1,550°F reported, 4C was determined to be in compliance with 40 C.F.R. Part 60 Subpart TT and Part 63 Subpart SSSS.
 - i. In the current operating permit, the minimum average combustion temperature in any 3-hour period is reported at 1,450°F for 4C. This appears to have been carried over from the former thermal oxidizer used with Coil Coating Line #1, 3C. 4C replaced 3C with R13-2379F and R30-00900004-2018 (MM01), which were both issued before the performance testing of 4C had taken place. Additionally, in the application for R13-2379F and R30-00900004-2018 (MM01), the permittee reported that an operating temperature range greater than 1,500°F was required by the manufacturer in order to maintain warranty.
 2. The initial performance test for the thermal oxidizer CO3 on Coil Coating Line #2 was conducted on September 24, 2002, and the compliance report was received by the DAQ on October 28, 2002. With a VOC destruction/removal efficiency of 98% at an average operating temperature of 1,661°F reported, CO3 was determined to be in compliance with 40 C.F.R. Part 60 Subpart TT and Part 63 Subpart SSSS.
 - b. With the amendments to Subpart SSSS, the operating limits of 4C and CO3 are now subject to change depending on the results of the periodic performance tests detailed in Condition 5.3.4. of

this renewal permit. Due to these amendments, the minimum combustion temperatures for each incinerator were removed from the condition and replaced with the requirements of 40 C.F.R. §63.5121(a) and Table 1 to Subpart SSSS of Part 63 which describe the operating limits that the permittee must meet.

1. The requirements of 40 C.F.R. §63.5121(a), which state that the permittee must meet the applicable operating limits specified in Table 1 to Subpart SSSS of Part 63, were previously included in Condition 5.1.12., which contains the temperature monitoring requirements for the thermal oxidizers found in 40 C.F.R. §63.5150(a)(3). As 40 C.F.R. §63.5121(a) provides a direct reference to Table 1 of Subpart SSSS of Part 63 and only an indirect reference to 40 C.F.R. §63.5150(a)(3), the requirements of 40 C.F.R. §63.5121(a) were moved to Condition 5.1.9 in this renewal permit.
 2. As stated previously, the requirements of 40 C.F.R. §63.5121(a) have been amended to require periodic performance tests to reestablish the operating limits used to demonstrate continuous compliance. The requirements included in Condition 5.1.9. have been updated accordingly.
- D. As described above, the requirements of 40 C.F.R. §63.5121(a) have been removed from Condition 5.1.12. and the citation has been removed from the authority.
- E. Condition 5.1.20. has been added to the operating permit. Paragraph a. contains the amended requirement from 40 C.F.R. §63.5140(a) that compliance with the applicable emission standards and operating limits must be met at all times. Paragraphs b. and c. of this condition contain the general requirements for the operation and maintenance of air pollution control equipment found in 40 C.F.R. §63.5140(b) and monitoring equipment found in 40 C.F.R. §63.5150(a).

IV. Section 5.2. – Monitoring Requirements – Coil Coating Line #1 and Coil Coating Line #2

- A. Paragraph a. of Condition 5.2.4. has been updated to account for the periodic compliance test requirements in Subpart SSSS. 40 C.F.R. §63.5150(a)(4)(i) has been amended to remove the specification for the “initial” compliance test.
- B. Paragraphs c., e.1., and e.2. of Condition 5.2.5. have been updated to remove the specification for “initial” performance tests due to the amendments that have been made to 40 C.F.R. §63.5170.

V. Section 5.3. – Testing Requirements – Coil Coating Line #1 and Coil Coating Line #2

- A. Condition 5.3.4. has been updated with the periodic performance test requirements of Table 1 to 40 C.F.R. §63.5160 and the procedures for the performance tests. Subpart SSSS of the NESHAP has been amended to require the permittee to conduct periodic performance tests every 5 years following the previous test. The permittee must conduct the first periodic performance test before March 25, 2023 unless a performance test of the control device was conducted on or after March 25, 2018. The performance test is to be used to determine the destruction and removal efficiency of each thermal oxidizer, to determine the capture efficiency, and to confirm or reestablish the operating limits.
 - a. 5.3.4.a. now includes the test methods and procedures for conducting the performance test to determine the destruction or removal efficiency of the control device, the recordkeeping requirements for operating conditions during the test, and the requirements for establishing the operating limits.
 - b. 5.3.4.b. has been added to this condition with the requirements for determining capture efficiency.

VI. Section 5.4. – Recordkeeping Requirements – Coil Coating Line #1 and Coil Coating Line #2

- A. Condition 5.4.4. was corrected to reference Conditions 5.1.13. and 5.1.18. which contain the limit requirements that correspond with those referenced in Condition 5.4.4. of R13-2379 (the authority for this condition).
- B. The reference to 40 C.F.R. §63.5160(f) has been removed from paragraph 5.4.7.b.5. of this permit. This reference is included in paragraph (a)(2)(v) of 40 C.F.R. §63.5190(a), which is the authority for Condition 5.4.7.; however, 40 C.F.R. §63.5160 does not contain a paragraph (f). The testing requirements for destruction/removal efficiency are included in 40 C.F.R. §63.5160(d), and the testing requirements for capture efficiency are included in 40 C.F.R. §63.5160(e).
- C. The provisions of 40 C.F.R. §63.5190(a)(5) have been added to the renewal permit as Condition 5.4.7.e. This recordkeeping requirement was added to Subpart SSSS with 85 FR 10867, which became effective on August 24, 2020, and sets the records that must be maintained for each deviation from an emission limitation reported under 40 C.F.R. §63.5180(h) (Condition 5.5.3.d. of the renewal permit).

VII. Section 5.5. – Reporting Requirements – Coil Coating Line #1 and Coil Coating Line #2

- A. Emission Points P16 and P17 were added to the report summary requirements in Condition 5.5.1. of this operating permit. These emission points were added to Condition 5.5.1. of R13-2379H when the applicable requirements for Coil Coating Line #2 were transferred from R13-3265. However, the emission points were not carried over into the Title V operating permit with the revision R30-00900004-2018 (AA01).
- B. Condition 5.5.3. has been updated to account for amendments in 40 C.F.R. §§63.5180(f), (g), and (h) and for the periodic performance test requirements in Subpart SSSS.
 - a. The requirements in Paragraph 5.5.3.a. of the current operating permit and the reference to 40 C.F.R. §63.5180(f) in the authority of the condition have been removed from this renewal permit. This paragraph contained the requirement that the permittee submit start-up, shutdown, and malfunction reports. However, as of August 24, 2020, the start-up, shutdown, and malfunction plan and start-up, shutdown, and malfunction report are no longer required by Subpart SSSS.
 - b. The reporting requirements of 40 C.F.R. §§63.5180(c) and (e) have been added to this condition as paragraphs a. and b., respectively. These paragraphs contain the requirements for the Notification of Performance Test and the performance test report that must be submitted when conducting the performance test of a control device used to comply with the emission standards of Subpart SSSS.
 - c. The requirements of 40 C.F.R. §§63.5180(g) and (h) have been renumbered as paragraphs 5.5.3.c. and 5.5.3.d., respectively.
 - d. In accordance with the amendment to 40 C.F.R. §63.5180(g), Paragraph 5.5.3.c.2.v. of this renewal permit has been updated to reference the applicable emission limits of 40 C.F.R. §63.5120 and the operating requirements of 40 C.F.R. §63.5121.
 - e. Condition 5.5.3.d. of this renewal permit has been updated in accordance with 40 C.F.R. §63.5180(h). The information that the permittee must include in the semi-annual compliance report regarding each deviation from an emission limit or operating limit and regarding downtime incidents of the continuous parameter monitoring system has been amended in the regulation.
- C. Condition 5.5.4. has been added to the permit with the electronic reporting requirements found in 40 C.F.R. §§63.5181(a) and (c). These electronic reporting requirements apply to the submission of performance test results and semiannual compliance reports required under Part 63 Subpart SSSS.

Non-Applicability Determinations

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

- a. **45CSR17** – *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage, and Other Sources of Fugitive Particulate Matter* – This rule does not apply, as stated in 45CSR§17-6.1. Sources that are subject to the fugitive particulate matter emission requirements of 45CSR7 are exempt from 45CSR17.
- b. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds* – This rule is not applicable because the facility is not located in any of the affected counties.
- c. **45CSR27** – *To Prevent and Control the Emissions of Toxic Air Pollutants* – This rule does not apply because this facility does not emit Toxic Air Pollutants above the benchmark values given in 45CSR27.
- d. **40 C.F.R. Part 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 HAPs. Therefore, the subpart does not apply.
- e. **40 C.F.R. Part 63 Subpart JJJJJ** – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* – This regulation does not apply since the boiler is natural gas-fired.
- f. **40 C.F.R. Part 68** – *Risk Management Plan* – This regulation is not applicable because none of the storage thresholds are triggered.
- g. **40 C.F.R. Part 64** – *Compliance Assurance Monitoring (CAM)* – Emission units with a control device are subject to an NSPS and MACT. Therefore, the facility is exempt from Compliance Assurance Monitoring in accordance with 40 CFR §64.2(b)(1)(i).

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: February 24, 2023

Ending Date: March 27, 2023

Point of Contact

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

Sarah Barron
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41915
sarah.k.barron@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)

On March 31, 2023, revisions to 45CSR30 were finalized. Accordingly, certain boilerplate conditions of the Title V operating permit have been updated as follows:

1. In 45CSR30, the definition of “Secretary” was relocated to 45CSR§30-2.39. Therefore, in Condition 2.1.3., the reference to 45CSR§30-2.12. has been replaced with 45CSR§30-2.39.
2. The emergency and affirmative defense requirements of Section 2.17. have been removed from the operating permit, and Section 2.17. has been marked as “Reserved.” The authority for these conditions, 45CSR§30-5.7., has been removed from 45CSR30.
3. 45CSR§30-8 has been revised and no longer requires the submission of certified emissions statements. Condition 3.5.4. has been updated accordingly.
4. The requirements of Conditions 3.5.7. and 3.5.8.a.1. have been removed from the operating permit and replaced with “Reserved.” due to the removal of 45CSR§30-5.7. from the rule.
5. Due to revisions in 45CSR§30-5.1.c.3.C.2., “telefax” has been updated to “email” in Condition 3.5.8.a.2.