

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 January 22, 2025.

Permit Number: **R30-03500049-2025**
Application Received: **December 16, 2024**
Plant Identification Number: **03-54-03500049**
Permittee: **Armstrong World Industries, Inc.**
Facility Name: **Armstrong Millwood Plant**
Mailing Address: **141 Sensenich Drive, Millwood, WV 25262**

Permit Action Number: *MM01* Revised: *June 10, 2025*

Physical Location: Millwood, Jackson County, West Virginia
UTM Coordinates: 427.2 km Easting • 4,307 km Northing • Zone 17
Directions: From US-33 E, turn left onto WV 68 S. Continue on WV 68 S for 0.4 miles. Turn right onto WV 2 S. Continue for approximately 6 miles. Turn right onto Jack Burlingame Road.

Facility Description

The Armstrong World Industries Millwood plant is a slag wool manufacturing facility covered under SIC Code 3296. It typically manufactures slag wool from silicomanganese slag. The plant receives the slag via truck or railcar, stores the slag in outdoor piles, and then transfers the slag to a belt conveyor via front-end loader. The slag is then transferred to a submerged Electric Arc Furnace (EAF) where the slag is melted using graphite electrodes. The molten slag is then transferred to one of two spinners which spin the molten slag into slag wool fibers. The wool fibers are then collected in one of two collection chambers, further processed into slag wool bales, and then shipped off site.

Emissions Summary

As a result of this minor modification MM01, the facility's PTE will decrease by the following amounts: 0.43 TPY for PM, 0.43 TPY for PM₁₀, 0.28 TPY for NO_x, 0.14 TPY for VOCs and 0.16 TPY for CO.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 241.38 tpy of CO and 245.02 tpy of SO₂. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Armstrong World Industries, Inc. 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:	45CSR13	Permits for construction, modification and relocation.
	45CSR30	Operating permit requirement.
State Only:	None	

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 active permits/consent orders affected by this modification are as follows:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2864F	April 17, 2025	

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

Minor modification MM01 was received in conjunction with Class I Administrative Update application R13-2864F. The purpose was to make the following changes: remove the temporary propane fired sand dryer (EU-18S), update the capacity of diesel storage tank #2 (EU - 13S) from 500 gallons to 1,000 gallons to reflect the as-built equipment on site, remove the emission limitations for diesel storage tanks #1 (EU – 12S) and #2 (EU - 13S) because they meet the definition of insignificant activities, update the VOC emissions for 3S and 4S to show a slight decrease in the hourly and annual limits and modify the definition of water truck to include an equivalent alternative such as an ATV-type vehicle equipped with a spray rig.

The following changes have occurred since the most recent Title V permit was issued as a result of minor modification MM01:

- **Table of Contents** – The reference to Storage Tanks was removed from Section 5.0.
- **Condition 1.1.** – The Emission Units table was updated to add information to the emission unit descriptions for Diesel Storage Tanks 12S and 13S, change the design capacity of 13S from 500 gallons to 1,000 gallons to reflect the as-built equipment on site and delete Propane-fueled Sand Dryer 18S.
- **Conditions 1.2. and 3.1.9.** – The current R13 permit number was updated to R13-2864F.
- **Conditions 3.7.2.b. and 3.7.2.c.** – These permit conditions were revised to remove the language regarding 18S.
- **Condition 4.0** – The reference to 18S was removed.
- **Condition 4.1.1.** – Table 4.1.1.1. was revised to include the updated hourly and annual VOC emissions for 3S and 4S to show a slight decrease, remove the entry row for 18S and remove footnote 3 pertaining to 18S. Table 4.1.1.2. was revised to remove the entry row for 18S.
- **Conditions 4.1.7.a. and 4.1.8.** – These conditions were revised to expand the definition of water truck to include other equivalent substitutes such as an ATV-type vehicle equipped with a spray rig.
- **Conditions 4.1.10. and 4.2.2.** – The references to 18S were removed from the citation.
- **Condition 4.2.6** – This permit condition was updated to include the word “day” after 15th.
- **Condition 4.2.11.** – This permit condition was updated to delete the word “date” and replace it with “day” to correct a typo.
- **Condition 4.2.12.** – This permit condition was removed because it pertains to 18S.
- **Condition 5.0** – The reference to Storage Tanks [12S and 13S] was removed.
- **Condition 5.1.1.** – This permit condition was removed because diesel storage tanks are considered insignificant activities.

Non-Applicability Determinations

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

- a. **40 CFR 60 Subpart CC – Standards of Performance for Glass Manufacturing Plants.** The Millwood Plant does not include glass melting furnaces, which are the affected facility to which this subpart applies (40 C.F.R. §60.290(a)). Therefore, this subpart is not applicable to the facility.
- b. **40 CFR 60 Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants.** Slag does not meet the definition of nonmetallic mineral.
- c. **40 CFR 60 Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries.** The Electric Arc Furnace does not meet the definition of a calciner or dryer in §60.731 and is therefore not subject to this subpart.
- d. **40 CFR 63 Subpart DDD – National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production.** The Millwood Plant is not classified as a major HAP source because potential HAP emissions are < 10/25 tpy for any single/combination of HAPs. In addition, the EAF is not classified as a “cupola” and the plant does not operate a mineral wool “curing oven”. For these reasons, the “mineral wool production NESHAP” at 40 CFR 63 Subpart DDD is not applicable.
- e. **40 CFR 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.** The Millwood Plant does not operate boilers and is therefore not subject to the Subpart JJJJJ Area Source ICI Boiler NESHAP.
- f. **45CSR17 - WV Fugitive emissions from material handling.** Per 45CSR§7-6.1. if sources are subject to 45CSR7, they are exempt from the requirements of this Rule.
- g. **45CSR19 and 45CSR21 WV NSR permitting for non-attainment areas and VOC Regulations.** The Millwood Plant is not located in affected areas.
- h. **45CSR27 - WV Emissions of Toxic Air Pollutants.** The Millwood Plant does not operate any “chemical processing units” and does not use listed chemicals.

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:	Not Applicable
Ending Date:	Not Applicable

Point of Contact

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

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@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.