

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 July 29, 2019.

Permit Number: **R30-03500049-2019**
Application Received: **August 7, 2019**
Plant Identification Number: **03-054-035-00049**
Permittee: **Armstrong World Industries, Inc.**
Facility Name: **Armstrong Millwood Plant**
Mailing Address: **P.O. Box 220, Millwood, WV 25262**

Permit Action Number: *MM01* Revised: *November 26, 2019*

Physical Location:	Millwood, Jackson County, West Virginia
UTM Coordinates:	472.2 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.

Proposed Modification

This permitting action will correct and update various emission units as permitted in R13-2864D with no new construction or modification.

Emissions Summary

The emissions associated with proposed changes are provided in the following table.

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	PTE^a	MM01 Change	Proposed PTE
Carbon Monoxide (CO)	242.15	- 0.61	241.54
Nitrogen Oxides (NO _x)	23.80	+ 0.42	24.22
Particulate Matter (PM _{2.5})	93.96	+ 1.14	95.10
Particulate Matter (PM ₁₀)	98.31	+ 1.14	99.45
Total Particulate Matter (TSP)	110.05	+ 1.14	111.19
Sulfur Dioxide (SO ₂)	245.03	+ 0.07	245.10
Volatile Organic Compounds (VOC)	22.31	+ 3.04	25.35
Hazardous Air Pollutants	PTE^a	MM01 Change	Proposed PTE
Manganese Compounds	9.43	- 0.16	9.27
Total HAPs excluding Mn	0.01	+ 0.02	0.03

^a Potential emissions (PTE) are from the Fact Sheet accompanying renewal permit R30-03500049-2019.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 241.54 tpy of CO and 245.10 tpy of SO₂. Due to this facility's potential to emit over 100 tons per year of 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 45CSR30	Construction/modification permits 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

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2864D	September 23, 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

1. **45CSR13 – Permit No. R13-2864D.** The changes have been made in the following operating permit sections based upon changes permitted in the underlying Class II Administrative Update Permit.

R13-2864D	Title V	Discussion of Changes
1.0	1.1.	The following changes have been made in the Emission Units table: <ul style="list-style-type: none"> ▪ The Housekeeping Vacuum System (EUID: 5S) has been deleted since it was never installed. ▪ A typographical error has been corrected for the design capacity of the Hydrated Lime Storage Silo (EUID: 6S). ▪ The design capacity of the Backup Generator (EUID: 7S) has been revised to reflect the as-built engine. ▪ The design capacity of the Diesel Storage Tank #1 (EUID: 12S) has been revised. ▪ The Glycol Additive Storage Tank (EUID: 14S) has been deleted since it was deactivated and removed in favor of new surfactant/binder materials that are delivered to the facility in totes. ▪ The design capacity for the Slag Wool Processing Units #1 and #2 (EUIDs: 15S and 16S) has been revised to specify the rate is based upon a 24-hour average.
2.5.1.	3.1.9.	This requirement has been incorporated into the operating permit.
4.0	4.0	Source 5S has been deleted from the heading.
Table 4.1.1.1.	Table 4.1.1.1.	<ul style="list-style-type: none"> ▪ Sources 3S and 4S VOC emission limitations have been revised. ▪ Source 5S and its emission limitations have been deleted. ▪ Source 6S PM and PM₁₀ emission limitations have been revised.
	5.1.1.	<ul style="list-style-type: none"> ▪ Source 12S VOC emission limitations have been revised. ▪ Source 14S and its VOC emission limitations have been deleted.
	6.1.1.	Source 7S PM, PM ₁₀ , NO _x , VOC, SO ₂ , and CO emission limitations have been revised.
Table 4.1.1.2.	Table 4.1.1.2.	Source 5S and its emission limitations have been deleted.
	5.1.1.	<ul style="list-style-type: none"> ▪ Source 12S VOC HAP and Total HAP emission limitations have been revised. ▪ Source 14S has been deleted but had no VOC HAP and Total HAP emission limitations.
	6.1.1.	Source 7S VOC HAP and Total HAP annual emission limitations have been revised.
4.1.9.	4.1.10.	Source 5S has been deleted from the list of affected sources.

R13-2864D	Title V	Discussion of Changes
4.1.13.	4.1.16.	The citation of authority has been changed from 45CSR§13-5.11. to 45CSR§13-5.10. as a result of removing section 5.8 of 45CSR13, effective June 1, 2017.
4.2.2.	4.2.2.	Source 5S has been deleted from the list of affected sources.

- 2. 40 C.F.R. Part 64 – Compliance Assurance Monitoring.** The renewal permit included condition 4.1.17., requiring the permittee to develop and submit a plan which meets the requirements of 40 C.F.R. Part 64 at least ninety (90) days prior to the proposed start-up of the Housekeeping Vacuum System (5S) and associated Housekeeping Dust Collector (5C). Since the underlying permit R13-2864D eliminated source 5S and its dust collector 5C as part of this permitting action, the requirement to submit a CAM Plan is no longer necessary and the permit condition has been deleted.
- 3.** The U.S. EPA contact information in condition 3.5.3. has been updated.

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: Not Applicable for minor modifications.
Ending Date: N/A

Point of Contact

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

Denton B. McDerment PE
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478
denton.b.mcderment@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 from U.S. EPA regarding the proposed permit.