

Fact Sheet



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

Permit Number: **R30-03300001-2022**
Application Received: **November 12, 2021**
Plant Identification Number: **03-54-033-00001**
Permittee: **Amsted Graphite Materials LLC**
Facility Name: **Anmoore Facility**
Mailing Address: **101 North Philippi Pike, Anmoore, WV 26323**

Physical Location: Anmoore, Harrison County, West Virginia
UTM Coordinates: 561.00 km Easting • 4,345.00 km Northing • Zone 17
Directions: Rt 58, Philippi Pike at Anmoore, WV.

Facility Description

This facility produces specialty carbon and graphite products by forming "green" carbonaceous shapes from raw materials consisting of petroleum coke and coal tar pitch. The "green" products are baked in natural gas fired, high temperature ovens and are then treated with liquid petroleum pitch and baked again prior to being processed into graphite using electrically heated furnaces. The graphite shapes are then machined and processed into varying products which are further processed to enhance their properties prior to shipment. SIC Code: 3624 - Electronic and Other Electrical Equipment & Components – Carbon and Graphite Products.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2020 Actual Emissions
Carbon Monoxide (CO)	2,741.31	310.80
Nitrogen Oxides (NO _x)	78.34	25.01
Lead (Pb)	<0.01	Not Reported
Particulate Matter (PM _{2.5})	5.64	4.12
Particulate Matter (PM ₁₀)	111.66	10.63
Total Particulate Matter (TSP)	221.77	18.34
Sulfur Dioxide (SO ₂)	201.37	24.13
Volatile Organic Compounds (VOC)	34.78	7.66

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2020 Actual Emissions
POM	9.23	2.63
Benzene	0.02	Not Reported
Toluene	0.02	Not Reported
Xylene	0.01	Not Reported
Styrene	0.01	Not Reported
Cresol	0.01	Not Reported
Methanol	0.01	Not Reported
Phenol	0.16	<0.01
Formaldehyde	0.26	<0.01
Total HAPs	9.73	2.63

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

Title V Program Applicability Basis

This facility has the potential to emit 2,741.31 TPY of carbon monoxide (CO), 111.66 TPY of particulate matter (PM₁₀), and 201.37 TPY of sulfur dioxide (SO₂). Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Amsted Graphite Materials LLC (AGM) 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	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
	45CSR10	To Prevent And Control Air Pollution from The Emission Of Sulfur Oxides
	45CSR11	Standby plans for emergency episodes
	45CSR13	Minor New Source Review Permits for Stationary Sources
	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.
	40 C.F.R. 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 64	Compliance Assurance Monitoring
	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	Permit Determinations or Amendments That Affect the Permit <i>(if any)</i>
R13-3039C	October 1, 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

This is the third renewal of the Title V permit for this facility.

Section 1.1 Emission Units

- Charge Ports 9 and 10 (027K and 027J) are now listed as currently out of service.
- The Building 3 Housekeeping Vacuum System (090) was placed back in service on March 30, 2021 with a like kind replacement.
- Removed Baghouse 042 along with its associated emission units (042A, 042B, 042C, 042D, 042E, and 042F) from the emission units table. Baghouse 042 is still in place (elevated frame above a office/lunch room building). The product line it serviced is no longer produced and the equipment which unloaded sand from containers and conveyed it to a material elevator has been removed so no sand can be conveyed to the elevator or the associated pack sizing equipment. A hood servicing a container filling station is still in there but abandoned in place.
- Removed Baghouse 043 along with its associated emission units (043A, 043B, 043C, and 043D) from the emission units table. Baghouse 043 was associated with the same process as baghouse 042. The material elevator, crusher, screening equipment, and material storage bins remain, but are decommissioned and have deteriorated. Proximity to a substation and the building makes removal of this equipment difficult.
- Removed emission point 053 since the saw, lathe, drill and grinder (053A, 053B, 053C, and 053D) used for physical testing of materials are no longer used and baghouse 053 was renamed as BH 462C and used to control the Ingate Process's Erich Mixer (462S).
- Baghouse 402 has always vented inside the building but is no longer in use since the saws only make limited cuts per day and a baghouse to control emissions from the saws is no longer needed; so it was removed from the Emission Units Table.
- Added to the description of Emission Point 067. The Baghouse serves both Zone 12 and the Lathe for the Ingate Process.
- Emission Unit 241 Tectyl 779 Bulk Oil Storage Tank Vent installed in 1988 was replaced in 1998 and again in 2005 with a like kind replacement – same vent size, location, and storage temperature as the previous tanks. Therefore, the installation date of 1988 has been updated with the new installation date of 2005. This change did not result in any new applicable requirements.

Section 3.0 Facility-Wide Requirements

- There have been no changes to the applicable requirements of R13-3039 since the last Title V permit modification, nor have there been any changes to the 45CSR7 requirements since the last Title V renewal. Therefore, the only changes made to this section were those made to update the boiler plate language.

Section 4.0 Source-Specific Requirements for Boilers

- There have been no changes to the applicable requirements of 45CSR2, 45CSR10, and 40 C.F.R. 60 Subpart Dc since the last renewal. Changes to R13-3039 were addressed during the last Title V permit modification. Therefore, no changes were made to this section during this renewal.

Section 5.0 Source-Specific Requirements for the Bake Process

- Removed reserved conditions 5.1.21 and 5.3.1. Renumbered conditions and cross references where needed.
- There have been no changes to the applicable requirements of 45CSR6 and 45CSR7 since the last renewal. Changes to R13-3039 were addressed during the last Title V permit modification.
- Removed Emissions points 042 and 043 from conditions 5.1.22 and 5.4.2 of this section (See section 1.1 discussion).
- CAM - Compliance Assurance Monitoring
 - Incinerator 080 and Baghouses 082 and 040 are still subject to CAM and there were no changes to their CAM specific requirements.

Section 6.0 Source-Specific Requirements for the Pitch Impregnation Process

- There have been no changes to the applicable requirements of 45CSR7 and 45CSR10 since the last renewal.
- CAM - Compliance Assurance Monitoring
 - Baghouse 040 is still subject to CAM and there were no changes to the CAM specific requirements of this section.

Section 7.0 Source-Specific Requirements for the Special Product, Rigid Graphite Insulation

- Removed reserved conditions 7.1.4, 7.1.6, 7.2.1, 7.3.1, 7.3.2, and 7.4.2. Renumbered conditions and cross references where needed.
- There have been no changes to the applicable requirements of 45CSR7 and 45CSR10 since the last renewal. Changes to R13-3039 were addressed during the last Title V permit modification.

Section 8.0. Source-Specific Requirements for Raw Materials Handling Operations

- Removed reserved conditions 8.1.1, 8.1.2, 8.2.2, and 8.2.3. Renumbered conditions and cross references where needed.
- There have been no changes to the applicable requirements of 45CSR7 since the last renewal. Changes to R13-3039 were addressed during the last Title V permit modification.
- CAM - Compliance Assurance Monitoring
 - Baghouses 070 and 074 are still subject to CAM therefore no changes were made to the CAM conditions of this Section.

The Old Section 9.0 which had been Reserved was removed. Additionally, Old Section 11.0 was removed as described below. Old Sections 10.0 and 12.0 have been renumbered as Sections 9.0 and 10.0.

Section 9.0 Source-Specific Requirements for the Graphite Machining and Materials Handling Process

- There have been no changes to the applicable requirements of 45CSR7 since the last renewal.
- CAM - Compliance Assurance Monitoring

- Baghouse 056 is still subject to CAM therefore no changes were made to the CAM conditions of this Section.

Old Section 11.0 Source-Specific Requirements for Shipping and Quality Control

- This was the old section 11.0 and has been removed because of the following:
 - The saw, drill, lathe and grinder used for physical testing of materials are no longer used and baghouse 053 was renamed as BH 462C and is now used to control the Ingate Process's Erich Mixer (462S).
 - The product lines no longer require the same type of packaging previously conducted in the Packaging and Shipping Building. Baghouse 402 has always vented inside the building but is no longer in use since the saws only make limited cuts per day and there is no requirement to use a baghouse with this equipment.
 - Table Saw 402A and Band Saw 402B vent inside of the packaging building and do not emit particulate matter into the open air. The only requirement they are subject to is the facility wide requirement 3.1.9 requiring minimization of fugitive emissions.

Section 10.0 Source-Specific Requirements for Mill, Mix, and Forming Operations

- There have been no changes to the applicable requirements of 45CSR7 since the last renewal. Changes to R13-3039 were addressed during the last Title V permit modification.
- CAM - Compliance Assurance Monitoring
 - Baghouses 012, 013, 014, 15, 016, 017, 018, 021, 023, 024, and 025 are still subject to CAM therefore no changes were made to the CAM conditions of this Section.

40 C.F.R. 64 - Compliance Assurance Monitoring

Amsted initially submitted an updated CAM plan for the facility which would have removed CAM requirements for some of the equipment. This CAM plan took into account recent R13 permit actions and changes in the throughputs of grandfathered equipment due to the elimination of some manufacturing processes and product sizes. During the review process, Amsted decided to continue using the CAM plan included in the 2017 Title V Permit, therefore no changes were made to the CAM conditions for this permit.

Non-Applicability Determinations

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

- a. **40CFR60 Subparts K, Ka, Kb** - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978; prior to July 23, 1984; or after July 23, 1984 respectively.

Regardless of the construction date these NSPS standards have an applicability threshold of either 40,000 or 20,000 gallons in which Amsted Graphite Materials (AGM) does not satisfy. The permittee's largest volatile organic liquid tank is 10,000 gallons or less. Therefore, the above referenced NSPS are not applicable to the following tanks permitted herein:

10,000 gallon, Tectyl 779 Bulk Process Oil Tank, constructed in 1988, Emission Point ID (241)
6,000 gallon, Diesel Fuel Storage Tank, constructed in 1985, Emission Point ID (215)
1,000 gallon, Unleaded Gasoline Fuel Storage Tank, constructed 1985, Emission Point ID (216)
500 gallon, Kerosene Fuel Storage Tank, constructed 1985, Emission Point ID (217)

- b. **40CFR60 Subpart Dc** - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
Two of the four boilers have the following characteristics:
Cleaver Brooks Natural Gas Fired Boiler, constructed in 1981, Rated capacity of 11.0 MMBtu/hr, ID (300)
Ames Natural Gas Fired Boiler, constructed in 1960, Rated capacity of 13.0 MMBtu/hr, ID (309)
As a result of these boilers being constructed before the corresponding applicability date of June 9, 1989, the boilers listed above were found not to be subject to the above referenced NSPS.
- c. **40CFR63 Subpart DDDDD** - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. AGM is not a major source of Hazardous Air Pollutants at this time.
- d. **40CFR63 Subpart JJJJJ** - National Emission Standards for Hazardous Air Pollutants for Industrial Commercial and Institutional Boilers Area Sources. Gas boilers are listed as being specifically exempt from these area source requirements under §63.11195(e).
- e. **40CFR63 Subpart SSSSS** - National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing. AGM maintains the exemption criteria based on carbon and chromium content within their products. AGM is not a major source of HAPs

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: July 19, 2022
Ending Date: August 18, 2022

Point of Contact

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

Robert Mullins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41286
Robert.A.Mullins@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.