

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on May 2, 2012.

Permit Number: **R30-3300001-2012**
Application Received: **January 22, 2013**
Plant Identification Number: **03-54-033-00001**
Permittee: **GrafTech International Holdings, Inc.**
Facility Name: **Anmoore Facility/ Harrison County**
Mailing Address: **P.O. Box 120**
Anmoore, WV 26323

Permit Action Number: *SM01* Revised: *June 18, 2013*

Physical Location: Anmoore, Harrison County, West Virginia
UTM Coordinates: 561 km Easting • 4,345 km Northing • Zone 17
Directions: Rt 58, Phillippi Pike at Anmoore, WV.

Facility Description

GrafTech's Anmoore facility falls under the SIC code of 3624 for carbon and graphite products. 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 purified, machined and processed into varying products which are further processed to enhance their properties prior to shipment.

SIC Codes: 3624 - Electronic and Other Electrical Equipment & Components – Carbon and Graphite Products.

This modification is to replace the 8.6 MMBtu/hr boiler, designated as Boiler 301, with a 12.6 MMBtu/hr boiler. This new boiler will be subject to 40CFR60, Subpart Dc. The new boiler will not result in an increase in production for the facility.

Emissions Summary

The following changes in potential emissions will result from this modification:

<i>Pollutant</i>	<i>Change in Potential Emissions (+ or -), TPY</i>
CO	+4.64
NO _x	+5.52
PM	+0.42
SO ₂	+0.03
VOC	+0.30

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 2,910.31 TPY of carbon monoxide (CO), 196.515 TPY of particulate matter (PM₁₀), and 134.293 TPY of sulfur dioxide (SO₂). Due to this facility's potential to emit over 100 tons per year of criteria pollutant, GrafTech 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:	45CSR2	Opacity and PM limits for boilers.
	45CSR10	Sulfur dioxide limits.
	45CSR13	NSR Permitting Requirements.
	45CSR16	Standards of Performance for new Stationary Sources.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60, Subpart Dc	Standards of performance for small industrial-commercial-institutional steam generating units.
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 (if any)
R13-0874	09/16/1986	90/50 mixing system, emission point 019 PM limit of 1.06 lb/hr PM.

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0893	11/20/1986	Shredding carbonized material 2000 hr/yr. Control device was moved to rail car unloading so rest of the permitted activities have been deemed inactive.
R13-1151	10/26/1989	Graphite Antioxidant treating process - 833 lb/hr drying oven Em. Pt. ID 307.
R13-1540B	07/11/2005	Update to GRI process in order to accurately reflect the use of a non-VOC binder solution as well as incorporating “ready to use” fibers rather than producing onsite. Permit covers pit baking of rigid graphite insulation.
R13-1569A	07/20/1999	Mod. to the processing of porous carbon, in which the pit baking furnaces will no longer be utilized and are to be replaced by the car bottom furnaces which are permitted under R13-2058A.
R13-1934B	01/10/2006	Purification appl. to bring equip. IDS in line with those shown in T-5 application, 1540A, and 1569A. This permit covers the graphite purification furnaces Em. Pt. IDS (055, 079).
R13-2047	06/04/1997	Vacuum pack transfer Loading of portable metal pack containers at bld 65, unloading at bld 54
R13-2058C	06/06/2006	Modification to R13-2058B which includes the addition of a second walk in, natural gas fired heat treating oven (095) and several fabrication stations with attendants for new IHM product. The materials will be fabricated inside the building and heat treated in the new heat treat oven, as well as the existing (094) oven and the existing carbottom furnaces (080-L, 080-M, 080-N), which will be serviced by an existing incinerator (EP#080).
R13-3039	04/09/2013	Replacement of the 8.6 MMBtu/hr boiler, designated as Boiler 301, with a 12.6 MMBtu/hr boiler
PD99-262	12/07/1999	Determination for the installation of an electrically heated Kiln in the bake department No permit required.
PD96-063	04/24/1996	No permit required, Changes to the Graphite Machining facility, which included the relocation of one saw and the installation of a baghouse type dust collection system. Em.Pt. 083 fugitive #233
PD95-009	04/09/1995	No Permit Required

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
PD95-091	12/27/1995	No Permit Required
PD98-033	03/19/1998	Permit Required, Determination for the addition of four pieces of machining equipment for the surface preparation of carbonaceous shapes. This was later incorporated in R13-2058A
PD98-014	02/26/1998	No Permit Required, installation of 2 NG nitrogen heaters to be used in conjunction with the car bottom furnaces permitted under R13-2058

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 made to the Title V permit for this modification:

1. In the 1.1 Emission Units table, the emission unit ID 301 was updated with the new replacement boiler's specifications.
2. In Section 1.2, the permit R13-3039 was added to the list of active permits.
3. In condition 3.4.1, "45CSR13, Permit R13-3039, (condition 4.4.1)" was added to the citation.
4. In condition 3.7.2.b, removed the line "Natural Gas Fired Boiler, Constructed in 1960, Rated capacity of 8.6 MMBtu/hr, ID (301)," since that boiler has been removed and the new boiler (301) is subject to 40C.F.R.60 Subpart Dc.
5. Since the new boiler 301 is greater than 10 MMBtu/hr it will be subject to 45CSR2 and 45CSR10. This will result in all of the boilers at the facility having the same applicable requirements from these rules. The following changes to the permit were made to reflect this.
 - a. In condition 4.1.2, the emission point ID 301 was added to the list of emission point IDs and the particulate matter limit for boiler 301 was added to the limits. Since all the boilers are now subject to this condition, the emission point list in the citation was removed since it would be redundant.
 - b. In condition 4.1.3, the emission point ID 301 was added to the list of emission point IDs and the SO₂ limit for boiler 301 was added to the limits. Since all the boilers are now subject to this condition, the emission point list in the citation was removed since it would be redundant.
 - c. In conditions 4.3.1, 4.3.2 and 4.4.1, the emission point lists in the citations were removed because it would be redundant given that all the boilers are subject to those conditions.
6. Added condition 4.1.4. These are limitations for the new boiler (301) from R13-3039. Note: In R13-3039 condition 4.1.1.d, the use of 45CSR§10-3.1.e is incorrect. Since the facility is in Harrison County, it is a Priority III region, which means it is subject to 45CSR§10-3.3.f.
7. Added condition 4.2.2, which is a monitoring requirement for the new boiler (301) from R13-3039 and also an applicable requirement of 40 C.F.R. 60 Subpart Dc.

8. Added condition 4.5.1 to incorporate the reporting requirements for the new boiler (301) from R13-3039 and 40 C.F.R. 60 Subpart Dc.

Note: R13-3039 contained conditions (4.1.2, 4.4.2, and 4.4.3) that pertained to control equipment. These requirements were not included in this permit modification since boiler 301 has no control equipment.

Non-Applicability Determinations

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

1. 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 GrafTech does not satisfy. The Company's largest volatile organic liquid tank is less than 10,000 gallons. 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)

2. 40CFR60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

Three of GrafTech's four boilers have the following characteristics:

Natural Gas Fired Boiler, Constructed in 1981, Rated capacity of 11.0 MMBtu/hr, ID (300)

Natural Gas Fired Boiler, Constructed in 1960, Rated capacity of 15.5 MMBtu/hr, ID (308)

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 data of, June 9, 1989 the boilers listed above were found not subject to the said NSPS.

3. 40CFR63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial Commercial and Institutional Boilers and Process Heaters.

GrafTech is not a major source of Hazardous Air Pollutants at this time.

4. 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).

5. 40CFR63, Subpart SSSSS – Refractory Ceramic MACT – GrafTech maintains the exemption criteria based on carbon and chromium content within their products. However, this MACT only affects major HAP sources, which GrafTech is not.

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: May 1, 2013
Ending Date: May 31, 2013

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
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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)

None.