

Fact Sheet



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

Permit Number: **R30-00900083-2006**
Plant Identification Number: **009-00083**
Permittee: **Murphy Consolidated Industries, Inc.**
Facility Name: **Murphy Field**
Mailing Address: **Post Office Box 70, Beech Bottom, WV 26030**

Revised: April 12, 2006

Physical Location:	Follansbee, Brooke County, West Virginia
UTM Coordinates:	533.9 Easting • 4463.5 Northing • Zone 17
Directions:	Near the north end of Follansbee, when traveling north on State Route 2 turn left onto Koppers Road at traffic signal, follow Koppers Road and cross over railroad tracks and turn left at next facility entrance.

Facility Description

Murphy Consolidated Industries, Inc. operates two coke screening stations at its facility. The two screening stations receive coke from Wheeling-Pittsburgh Steel Corporation coke oven batteries for classification into three sizes. Each screening station consists of a feed hopper, one stock coke conveyor that transports the coke to the three-deck screen unit, and three conveyors that carry the size-classified coke to its respective surge pile. The facility is SIC Code 3299.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2004 Actual Emissions
Carbon Monoxide (CO)	0	
Nitrogen Oxides (NO _x)	0	
Lead (Pb)	0	
Particulate Matter (PM ₁₀)	0.098	
Total Particulate Matter (TSP)	0.210	
Sulfur Dioxide (SO ₂)	0	
Volatile Organic Compounds (VOC)	0	

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2004 Actual Emissions

Note that Actual Emissions are not given since the facility has not been (until time of the initial Title V permit application) considered a major source, and therefore, not required to submit a Certified Emission Statement (CES) each year.

Title V Program Applicability Basis

Based upon the location of Murphy Consolidated Industries (hereinafter called, "Murphy"), the "support facility" definition provided in EPA guidance (40CFR§51.165.a.1.viii.), and the business relationship with Wheeling-Pittsburgh Steel Corporation (WPSC), it was determined that Murphy and WPSC are considered one source for Title V applicability purposes. Furthermore, it was determined and agreed upon that WPSC's Title V permit would be separate from Murphy's Title V permit. These determinations were documented in a letter from the WV DAQ to Alan McLaughlin, President of Murphy Consolidated, dated January 18, 2005. Therefore, Murphy Consolidated Industries' facility 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:	45CSR6	Open burning prohibited.
	45CSR7	Control of Particulate Matter Pollution from Manufacturing Processes
	45CSR7A	Compliance Test Procedures for 45CSR7
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary

	WV Code § 22-5-4 (a) (14)	Sources The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	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 draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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, 45CSR15, 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>)
R13-2548A	July 20, 2005	

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 "B", which may be downloaded from DAQ's website.

Determinations and Justifications

1. **Feedhopper/Conveyors (Emission Unit ID's: SS1-A, SS2-A)**
 - a. **45CSR13, Permit No. R13-2548A-4.1.1. and 4.1.2.** - The source-specific requirements in section 4.1.1. of the Rule 13 permit limit the throughput of Station 1 coke screening station to 125 tons/hour and 100,000 tons/year (based upon a rolling 12 month total). Section 4.1.2. of the permit limits the throughput of Station 2 coke screening station to 125 tons/hour and 100,000 tons/year (based upon a rolling 12 month total).
 - b. **45CSR§§7-3.1, 4.1, 5.1, 5.2** - Murphy is subject to this rule since its process is part of a manufacturing process that generates particulate matter. For the purposes of this rule, the process at the Murphy facility is a Type 'a' source since it is a physical change manufacturing process. For sources subject to this rule, **Section 3.1** sets the opacity limitation at twenty (20) percent. **Section 4.1** of the rule limits the weight emission rate for each screening station to 38.5 lb/hr. This limit is determined by linear interpolation in Table 45-7A at the process rate of (125 ton/hr) x (2000 lb/ton) = 250,000 lb/hr, for a Type 'a' process. This emission rate is streamlined by the throughput limitation in 4.1.1. of R13-2548A, computed with AP-42 Section 13.2.4 drop equation emission factors, which yields a total suspended particulate (TSP) emission rate of 0.075 lb/hr. Therefore, compliance with the more stringent emission rate limits set forth in R13-2548A with the throughput limits, will ensure compliance with 45CSR§7-4.1. **Section 5.1** of the rule sets forth the requirements to limit fugitive particulate matter emissions. For the feedhopper/conveyor the permittee will implement "good operating practices" to limit fugitive PM emissions. The "good operating practices" shall include, but not be limited to: process equipment design, control equipment design, operation and maintenance procedures. **Section 5.2** of the rule requires the permittee to maintain particulate matter control on the plant premises by suitable dust control measures.
 - c. **45CSR7A** - This rule was not sited in the applicable requirements section of the permittee's Title V application. The permittee has agreed to periodically monitor particulate matter emissions to ensure compliance with the opacity limit (45CSR§7-3.1.), and the fugitive particulate matter requirements (45CSR§7-5.1.). Periodic monitoring shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 22. When necessary, monitoring shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9. The current method used at Wheeling-Pittsburgh Steel's facility will be adopted by, and implemented at the permittee's facility.

2. **Three-Deck Coke Screens (Emission Unit ID's: SS1-B, SS2-B)**
 - a. **45CSR13, Permit No. R13-2548A-4.1.1. and 4.1.2.** - The source-specific requirements in section 4.1.1. of this permit limit the throughput of Station 1 coke screening station to 125 tons/hour and 100,000 tons/year (based upon a rolling 12 month total). Section 4.1.2. of the permit limits the throughput of Station 2 coke screening station to 125 tons/hour and 100,000 tons/year (based upon a rolling 12 month total).
 - b. **45CSR13, Permit No. R13-2548A-4.1.3.** - The permittee shall install and maintain an overhead tarp cover on each screening unit sufficient to minimize particulate matter emissions from the screens. It is imperative that the permittee maintain the overhead tarp so that PM control efficiency is maximized.
 - c. **45CSR§§7-3.1, 4.1, 5.1, 5.2** - Murphy is subject to this rule since its process is part of a manufacturing process that generates particulate matter. For the purposes of this rule, the process at the Murphy facility is a Type 'a' source since it is a physical change manufacturing process. For sources subject to this rule, **Section 3.1** sets the opacity limitation at twenty (20) percent. **Section 4.1** of the rule limits the particulate matter weight emission rate for each screening station to 38.5 lb/hr. This limit is determined by linear interpolation in Table

45-7A at the process rate of $(125 \text{ ton/hr}) \times (2000 \text{ lb/ton}) = 250,000 \text{ lb/hr}$, for a Type 'a' process. This emission rate is streamlined by the throughput limitation in 4.1.1. of R13-2548A, when computed with AIRS emission factors of 0.09 lb PM/ton of coke and 0.04 lb PM₁₀/ton of coke. The coke screens are fully enclosed units, which must guarantee a 99% control efficiency of particulate matter. The calculation yields a total suspended particulate (TSP) emission rate of 0.11 lb/hr. Therefore, compliance with the more stringent emission rate limits set forth in R13-2548A with the throughput limits, will ensure compliance with 45CSR7-4.1. **Section 5.1** of the rule sets forth the requirements to limit fugitive particulate matter emissions. For the screening stations, the permittee will implement "good operating practices" to limit fugitive particulate matter emissions. The "good operating practices" shall include, but not be limited to: process equipment design, control equipment design, operation and maintenance procedures. **Section 5.2** of the rule requires the permittee to maintain particulate matter control on the plant premises by suitable dust control measures. The permittee shall maintain the coke moisture content at a level to minimize PM generation.

- d. **45CSR7A** - This rule was not sited in the applicable requirements section of the permittee's Title V application. The permittee has agreed to periodically monitor particulate matter emissions to ensure compliance with the opacity limit (45CSR§7-3.1), and the fugitive particulate matter requirements (45CSR§7-5.1). Periodic monitoring shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 22. When necessary, monitoring shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

3. **Product Belt Conveyors (Emission Unit ID's: SS1-C, SS1-D, SS1-E, SS2-C, SS2-D, SS2-E)**

- a. **45CSR§§7-3.1, 4.1, 5.1, 5.2** - The permittee is subject to this rule since its process is part of a manufacturing process that generates particulate matter. For the purposes of this rule, the process at the permittee's facility is a Type 'a' source since it is a physical change manufacturing process. For sources subject to this rule, **Section 3.1** sets for the opacity limitation at twenty (20) percent. **Section 4.1** of the rule sets forth the requirements for the weight emission rate for particulate matter. For each screening station, there are three (3) conveyors that carry size classified coke to their respective surge piles. **Section 5.1** of the rule sets forth the requirements to limit fugitive particulate matter emissions. For the classified product conveyors, the permittee will implement "good operating practices" to limit fugitive particulate matter emissions. The "good operating practices" shall include, but not be limited to: process equipment design, control equipment design, operation and maintenance procedures. **Section 5.2** of the rule requires the permittee to maintain particulate matter control on the plant premises by suitable dust control measures. The permittee shall minimize drop heights of the coke when loading the feedhopper. The permittee shall also maintain the coke moisture content at a level to minimize PM generation.
- b. **45CSR7A** - This rule was not sited in the applicable requirements section of the permittee's Title V application. The permittee has agreed to periodically monitor particulate matter emissions to ensure compliance with the opacity limit (45CSR§7-3.1), and the fugitive particulate matter requirements (45CSR§7-5.1). Periodic monitoring shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 22. When necessary, monitoring shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

Non-Applicability Determinations

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

1. **45CSR17 - To Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter** - Paragraph 2.3 of this rule defines fugitive particulate matter as particulate matter which becomes airborne from activities including, but not limited to: handling, transporting or storage of materials. The definition given in the rule also includes haul roads, plant grounds, and any other activity which generates airborne particulate matter. The permittee's facility is characterized by these sources of fugitive particulate matter, which would make the permittee subject to the rule. However, in the Exemptions paragraph 6.1 of the rule, a facility that is subject to 45CSR7 shall be exempt from the provisions of this rule, provided that such sources shall not be exempt from the provisions of W. Va. Code §§22-5-1 et seq., including the provisions of §22-5-3 relating to statutory air pollution. The permittee is subject to 45CSR7; therefore, the facility is not subject to 45CSR17.
2. **40 C.F.R. Part 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants** - The permittee processes coke (a nonmetallic mineral) using feed hoppers and conveyors supplying screening stations. In §60.670(a)(1) screening operations and belt conveyors used to process nonmetallic minerals are listed as applicable sources, except as provided in paragraphs (a)(2), (b), (c) and (d) of the applicability section in the rule. In paragraph (a)(2) of the applicability section, stand-alone screening operations at plants without crushers or grinding mills are excluded from being subject to this regulation. The facility does not have a crusher or grinding mill on-site; therefore, the facility is not subject to this NSPS.

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 23, 2006

Ending Date: March 27, 2006

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

Denton McDerment
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

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.

Point of Contact

Denton McDerment
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

Response to Comments

1. A written comment dated March 27, 2006, was received via electronic mail and facsimile from Mr. Harold Strohmeyer, Environmental Control, Wheeling-Pittsburgh Steel Corporation. He commented that on page 21 item 4.2.1.3 it appears that the agency desires Murphy to redo the initial weighing of coke material. The proposed Title V permit condition 4.2.1.3. was a requirement to be fulfilled subsequent to issuance of permit R13-2548A, and has been completed. Therefore, the proposed Title V permit condition 4.2.1.3. is not required to be performed again within sixty (60) days of issuance of the Title V permit, unless however such monitoring in 4.2.1.3. would be required by permit condition 4.2.1.5. The proposed Title V permit condition 4.2.1.3. will be changed to read, "Within 60 days of the issuance of permit R13-2548A, the permittee must obtain..."