West Virginia Department of Environmental Protection
Division of Air Quality

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 June 23, 2009.

Permit Number: **R30-06100001-2009**
Application Received: **June 7, 2010**
Plant Identification Number: **03-54-061-00001**
Permittee: **Monongahela Power Company**
Facility Name: **Fort Martin Power Station**
Mailing Address: **800 Cabin Hill Drive, Greensburg, PA 15601**

Permit Action Number: *SM01* Revised: *September 21, 2010*

Physical Location:	Maidsville, Monongalia County, West Virginia
UTM Coordinates:	591.91 km Easting • 4395.95 km Northing • Zone 17
Directions:	From Morgantown, WV travel on WV-100 approximately 3.6 miles. Turn right on County Route 53 to the Power Plant.

Facility Description

The Fort Martin Power Station is a fossil fuel fired electric generation facility with two units (560 MW and 568 MW) and operates under Standard Industrial Classification (SIC) code 4911. The facility consists of two (2) 4,984 MMBtu/hr coal-fired boilers, two (2) 115.3 MMBtu/hr auxiliary boilers, two (2) 320 KW diesel-fired emergency generators, boiler-related lime handling and various supporting operations such as coal handling, ash handling, wastewater treatment and various storage tanks with insignificant emissions. The facility has the potential to operate seven (7) days per week, twenty-four (24) hours per day and fifty-two (52) weeks per year.

Description of Requested Change № 1 (*45CSR2 Monitoring Plan*)

Fort Martin Power Station recently installed two (2) Babcock and Wilcox Wet Limestone/Forced Oxidation Flue Gas Desulfurization (FGD) systems on Boiler #1 and Boiler #2. Unit #1 FGD was started up on November 15, 2009 and Unit #2 FGD was started up on December 17, 2009. A new stack consisting of a concrete shell with two (2) individual fiberglass stack liners (one for each boiler and FGD), with new CEMS were also installed.

The monitoring and recordkeeping plan in Appendix A of the current Title V permit contains monitoring requirements based on the use of continuous opacity monitors (COMS) that were used in the old unscrubbed stacks that were disconnected from the boilers with the startup of the FGD systems and new stacks. In accordance with 45CSR§2-3.2., continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control; therefore, the new scrubbed stacks do not contain COMS.

An alternative monitoring method was proposed on March 25, 2010 based on the use of a well established parametric monitoring methodology that is currently employed at the permittee's other scrubbed power plants in West Virginia.

The permittee has requested to replace the monitoring plan in Appendix A of the current Title V permit with a monitoring plan revision 3. The permittee states that condition 4.2.1. in the current permit will also need to be revised to reflect the dates for the revised monitoring plan.

Description of Requested Change № 2 (*40 C.F.R. Part 64 – Compliance Assurance Monitoring Plan*)

The CAM plan that was submitted and approved for use at the Fort Martin Power Station was based on the use of particulate matter to ESP power correlation that requires the monitoring of Total ESP power levels as per Title V permit conditions 4.2.2. and 4.4.7. The CAM attachments to the Title V renewal application and the CAM test reports that were submitted on October 28, 2009 also describe this monitoring approach. The CAM plan was developed in this manner because the permittee knew that the use of COMS was to be discontinued with the installation of the FGD systems in 2009.

The permittee proposed that CAM excursions were to be defined as operation of the ESP's below the minimum power levels established during the CAM testing program. These minimum power levels are based on 3-hour block averages of the total ESP secondary power as follows: Boiler #1 – 225 kW; and Boiler #2 – 270 kW.

The current version of the Title V permit, however, at condition 4.2.9. defines CAM excursions as greater than eight (8) percent opacity during any six-minute period during any one-hour period. The elimination of COMS at Fort Martin makes this condition superfluous. The permittee believes that this condition was in error and should either be removed from the permit or replaced with the minimum total ESP secondary power levels described above, based on a 3-hour block average.

Condition 4.5.5.(1) requires that CAM monitoring reports be submitted both with the quarterly excess emission reports and with the semi-annual monitoring reports. The permittee requests that this condition be revised to only require submission of CAM monitoring reports with the semi-annual Title V monitoring reports. This would be consistent with the CAM reporting requirements at our other scrubbed West Virginia power stations and would eliminate duplicative reporting.

Emissions Summary

There are no changes in emissions for this permitting action according to Section 4 of the application.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 135,405 tons per year of SO_2; 13,119.8 tons per year of NO_X; 2,471 tons per year PM_{10}; 915.8 tons per year CO; 127.1 tons per year VOCs; 1,828.6 tons per year of HCl; and 234.3 tons per year of HF (i.e., hydrogen fluoride – not hydrogen *fluorine* as given in the renewal Fact Sheet). Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Monongahela Power Company's Fort Martin Power Station 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	Control of particulate matter emissions from indirect heat exchangers
	45CSR2A	Testing and MRR requirements under 45CSR2
	45CSR6	Control of Air Pollution from Combustion of Refuse
	45CSR10	Control of sulfur dioxide emissions from indirect heat exchangers
	45CSR10A	Testing and MRR requirements under 45CSR10
	45CSR13	Permits for construction/modification
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60
	45CSR30	Operating permit requirement
	45CSR34	Emission Standards for HAPs
	40 C.F.R. 60 Subpart OOO	NSPS Nonmetallic Mineral Processing Plants
	40 C.F.R. Part 64	Compliance Assurance Monitoring
State Only:	None	

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, 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)*
R13-2705	June 22, 2007	
R13-2711A	September 24, 2007	Supersedes Permit No. R13-2711
R13-2729	February 7, 2008	
Class II General Permit Registration to Construct G60-B006	June 10, 2008	
Phase II Acid Rain Permit No. R33-3943-2012-3	June 22, 2007	
Compliance Order No. CO-R37-C-2008-4	April 7, 2008	
CAIR Permit Application	June 25, 2007	

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

Throughout the following discussion, the terminology "current permit" refers to the Title V renewal permit R30-06100001-2009, issued on June 23, 2009. The term "application" refers to the application submitted by the permittee for this significant modification permitting action (SM01), unless otherwise noted. After obtaining the process flow diagrams pertinent to this permitting action, the application was deemed administratively complete as of the date received.

I. **45CSR2 –** ***To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers***
45CSR2A – ***Testing, Monitoring, Recordkeeping and Reporting Requirements under 45CSR2***

a. **COMS not required**. In accordance with 45CSR§2-3.2., continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control. 45CSR§2-2.37 states that a "Wet Scrubber System" means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from an indirect heat exchanger to control emissions of particulate matter (PM) or SO_2. Since the new FGD systems meet this rule definition, the fuel burning units' new scrubbed stacks are not required to be monitored by COMS. *Note:* The fact that COMS is not required does not, however, exempt the permittee from complying with the applicable 10% opacity limit of 45CSR§2-3.1. (condition 4.1.1.). Compliance will be demonstrated by the DAQ Enforcement-approved Rule 2 monitoring and recordkeeping plant, discussed below.

b. **CEMS Monitoring.** Applicable requirement 45CSR§2-8.2.a. requires the permittee to monitor in accordance with an approved monitoring plan for each emission unit (permit condition 4.1.7.). Such monitoring plan(s) shall include, but not be limited to, one or more of the following: continuous measurement of emissions, monitoring of emission control equipment, periodic parametric monitoring, or such other monitoring as approved by the Director. According to the application, the permittee is employing a continuous emissions monitoring system (CEMS). This

type of system fulfills part of the requirement of 45CSR§2-8.2.a., while the monitoring plan itself fulfills the remaining part of this applicable requirement.

c. **45CSR2A Monitoring and Recordkeeping Plan**. The permittee submitted a monitoring plan entitled "REVISION 3 Monitoring and Recordkeeping Plan 45CSR2 and 45CSR10 Utility Boilers" with the application. This monitoring plan had been previously submitted under a separate cover (March 25, 2010) and received by DAQ on March 29, 2010. The monitoring and recordkeeping plan was reviewed by Mr. Michael Rowe (DAQ Enforcement), and he approved it in a July 7, 2010 letter addressed to Mr. Mark Sowa (Manager, Air Quality for Allegheny Energy). The submitted monitoring plan revision 3 is inserted as Appendix A of the permit, and will replace revision 2. Refer to permit condition 4.2.1.

II. **45CSR6 – *To Prevent and Control Air Pollution from Combustion of Refuse***. The language of conditions 3.1.1. and 3.1.2. was revised in order to match the current rule language.

III. **45CSR10 – *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides***
45CSR10A – *Testing, Monitoring, Recordkeeping and Reporting Requirements under 45CSR10*
The permittee submitted a monitoring plan entitled "REVISION 3 Monitoring and Recordkeeping Plan 45CSR2 and 45CSR10 Utility Boilers" with the application. This monitoring plan had been previously submitted under a separate cover (March 25, 2010) and received by DAQ on March 29, 2010. The monitoring plan was reviewed and approved with the Rule 2 monitoring and recordkeeping plan described above. The plan revision 3 is inserted as Appendix A of the permit, and will replace revision 2.

IV. **45CSR30 – *Requirements for Operating Permits***.

a. **Permit Structure.** The heading for permit subsection 1.1. was added.

b. **Annual Compliance Certification Submittal.** U.S. EPA has instructed DAQ that permittee's are to submit their annual compliance certification to U.S. EPA via e-mail only (*i.e.*, no paper "hard copies" to U.S. EPA). The language of conditions 3.5.3. and 3.5.5. have been modified to provide for this new stipulation.

c. **Emission Units Revision.** The current list of emission units in Table 1.4 (permit subsection 1.0) is based upon the equipment listed in Permit to Modify R13-2711. This NSR permit has been superseded by the current Class II Administrative Update R13-2711A (issued 11/14/2007) that accounted for engineering design changes to the materials handling system. The change resulted in the elimination of some equipment and the addition of a gypsum storage pile. Table 1.4 has been modified to match all information as given in Section 1.0 of current permit R13-2711A. These changes also precipitated the non-applicability determination set out below.

V. **40 C.F.R. Part 64 – *Compliance Assurance Monitoring* (CAM)**
This writer confirmed that the CAM plan submitted by the permittee in the renewal application is based on the use of particulate matter to ESP power correlation that requires the monitoring of total ESP power levels. It appears that both the excursion definition (4.2.9.) and extra CAM reporting to accompany the quarterly excess emission reports (4.5.5.(1)) in the current permit were inadvertently written in the Fort Martin permit by borrowing them from another power station's renewal permit (*i.e.*, Morgantown Energy Associates, 061-00027). This writer wrote Morgantown Energy Associate's (MEA) renewal permit, and thus this reporting and opacity range are familiar. MEA's DAQ Title V renewal file indicates that they requested the reporting with the excess emission reports (cf. 7/30/2008 email in the Interim Permit Review file folder). Furthermore, this extra reporting is not contained in other renewal permits (including two other power stations) written by this writer that also included a CAM plan. The language of condition 4.5.5.(1) has been revised to remove the requirement to include CAM reporting with the quarterly excess emission reports. The excursion definition for Morgantown Energy is to exceed 8-percent opacity during any six-minute period during any one-hour period after supplementary actions have been taken. It appears then that this was also inadvertently carried over into the Fort Martin permit. This opacity range was not proposed in the permittee's renewal

application CAM plan. Moreover, an opacity indicator range for CAM purposes is not applicable for the modified facility. Condition 4.2.9. will be revised to remove the opacity range, and instead specify the minimum total ESP secondary power levels for each boiler, as suggested by the permittee. Table A below was copied from the renewal Fact Sheet, and has been corrected and modified where appropriate to incorporate CAM testing results that have been obtained pursuant to condition 4.2.4.

Table A – Modified CAM Plan for Units #1 and #2 for Particulate Matter			
Unit 1 & Unit 2			*Indicator No. 1*
I.	*Indicator*		ESP Secondary Power Input
	Monitoring Approach		ESP secondary voltage is measured using a voltmeter and the secondary current is measured using an ammeter. The total power (P) input to the ESP is the sum of the products of secondary voltage (V) and current (I) in each field. ($P = V_1I_1 + V_2I_2$) (permit condition ~~4.2.5.~~ 4.2.2.)
II.	*Indicator Range or Designated Condition*		An excursion will be defined as a three-hour average ESP secondary power less than ~~(value to be determined based on TEOM 7000 testing) kW~~ 225 kW for Unit #1; and 270 kW for Unit #2 (permit condition 4.2.9.)
III.	*Performance Criteria*		
	A.	*Data Representativeness*	The secondary voltage and current for each ESP field are directly measured using instrumentation integrated in the ESP unit (permit condition 4.2.2.).
	B.	*Verification of Operational Status*	N/A
	C.	*QA/QC Practices and Criteria*	Calibrate, maintain, and operate instrumentation in accordance with manufacturer's specifications. (permit condition ~~4.2.7.~~ 4.2.3.)
	D.	*Monitoring Frequency*	The secondary voltage and current are measured continuously and recorded no less than four times per hour, equally spaced over each hour. (permit condition ~~4.2.5.~~ 4.2.2.)
	E.	*Data Collection Procedures*	The total secondary ESP power input (in kW) is calculated and recorded in an electronic data acquisition system no less than four times per hour, equally spaced over each hour. (permit condition ~~4.4.10.~~ 4.4.7.)
	F.	*Data averaging periods*	3-Hour (permit condition ~~4.4.10.~~ 4.4.7.)

According to the application, CAM test reports were submitted on October 28, 2009. Since CAM testing is complete, and the CAM plan has been implemented based upon the test results, all

requirements of current condition 4.2.4. have been fulfilled. Further, this permit condition contains no ongoing requirements. For these reasons, condition 4.2.4. has been stricken and reserved.

VI. **40 C.F.R. Part 60 Subpart OOO - *Standards of Performance for Nonmetallic Mineral Processing Plants*.**

Introduction & Background Information

The permittee provided a Subpart OOO non-applicability determination in the renewal application. In keeping with this, a permit shield was written as section 3.7.2.c. of the current permit, which states the following:

> *40 C.F.R Part 60, Subpart OOO - Standards of Performance for Non-Metallic Mineral Processing Plants are not applicable to the Fort Martin Limestone Handling system based upon the Initial Crushing capacity to the Limestone system being 100 tons/hour, which is less than 150 tons/hour threshold of applicability for Subpart OOO (as defined in 40C.F.R. 60.670(c)(2)).*

With the exception of the rule citation in parentheses, the foregoing italicized language is verbatim from the renewal application. Upon examination of §60.670(c)(2) it can be determined that this exemption applies to "Portable sand and gravel plants and crushed stone plants" with capacities less than 150 tons per hour. One question that then arises is whether or not "Portable" is limited to sand and gravel plants, or does "Portable" also describe crushed stone plants? The answer to this question is determined by comparing §60.670(c)(2) with §60.670(c)(1). Note that §60.670(c)(1) grants an exemption to "Fixed sand and gravel plants and crushed stone plants" with capacities less than 25 tons per hour. If both of these exemptions applied to all crushed stone plants, then there would be a double standard of 25 tph and 150 tph for determining applicability. Without belaboring the point, it is clear that §60.670(c)(1) applies to *fixed* crushed stone plants, while §60.670(c)(2) applies to *portable* crushed stone plants. This important distinction is not discussed in permit section 3.7.2.c. The determination in 3.7.2.c. suggests that as long as the initial crushing capacity is less than 150 tph, the facility is not subject to Subpart OOO. However, this exemption is only true for *portable* sand and gravel plants and crushed stone plants. The next logical question is whether the permittee's limestone crushing system is a *portable plant* or *fixed plant* (as defined in §60.671). If it is portable, then it must be less than 150 tph capacity to be exempt from Subpart OOO. If it is fixed, then it must be less than 25 tph capacity to be exempt. Inspection of the Plot Plan provided in the renewal application (Washington Group International Dwg. No. F09-12-11-020-001, Rev. 2) indicates, by virtue of its size, that the limestone crushing and handling system is most likely a *fixed plant*. Mr. Mark Sowa (permittee's environmental contact) responded in technical correspondence (7/1/2010 email to this writer) that the system is a "fixed plant" as defined by §60.671. Since this is a fixed plant, the exemption of §60.670(c)(2) for portable plants is irrelevant. According to the current non-applicability determination at permit section 3.7.2.c., the initial crushing capacity of limestone is 100 tons per hour. The exemption at §60.670(c)(1) for fixed plants can be claimed by plants with capacities of 25 tons per hour or less. However, since the permittee's limestone crushing and handling system does not meet the exemption criteria at §60.670(c)(1) by exceeding 25 tph, its affected facilities (listed at §60.670(a)(1)) are subject to the applicable requirements of 40 C.F.R. 60 Subpart OOO. Finally, in addition to these facts, the Engineering Evaluation for permit R13-2711 concurs that the facility is subject to Subpart OOO, and should have no problem meeting its requirements due to the use of water sprays, full and partial enclosures, and baghouses. Current permit shield section 3.7.2.c. for 40 C.F.R. Part 60 Subpart OOO has been stricken in the revised operating permit.

The following Table B lists all of the emission units that were either (i) supposedly exempt from Subpart OOO according to the renewal application; (ii) listed in the current Title V permit Table 1.4; or (iii) are now listed in permit R13-2711A. Some of those listed in the current Title V permit will be eliminated due to the issuance of permit R13-2711A. Most important are the sources listed in Table 1.4 of the proposed operating permit Section 1.1, and these will be accounted for in the table below. Note that the permittee's equipment will be compared with the following affected facilities (*cf.* 40 C.F.R.

§60.670(a)(1)) in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

Table B – NSPS Subpart OOO Applicability Determination for Affected Facilities

Em. Unit	Description	Affected Facility [1]	Comment
LUC-1	Limestone Unloading Crane	NAF	Not listed at §60.670(a)(1).
LSH-1	Limestone Surge Hopper	*storage bin*	Listed under condition 9.1.1.
LBF-1	Weigh Belt Feeder 1	*belt conveyor*	Listed under condition 9.1.1.
LBF-2	Weigh Belt Feeder 2	*belt conveyor*	Listed under condition 9.1.1.
LBF-3	Limestone Belt Feeder 3	EDC	Not included in R13-2711A.
LBF-4	Limestone Belt Feeder 4	EDC	Not included in R13-2711A.
LBF-5	Limestone Belt Feeder 5	EDC	Not included in R13-2711A.
L-1	Limestone Receiving and Stacker Conveyor	*belt conveyor*	Listed under condition 9.1.1.
TC-1	Limestone Pile Telescopic Chute	Integral to *belt conveyor* L-1	Listed under condition 9.1.1.
LSP	Limestone Storage Pile	NAF	Not listed at §60.670(a)(1).
RPF-1A	Limestone Reclaim Rotary Plow Feeder	NAF	Not listed at §60.670(a)(1).
RPF-1B	Limestone Reclaim Rotary Plow Feeder	NAF	Not listed at §60.670(a)(1).
LRH-1	Limestone Reclaim Hopper 1	EDC	Not included in R13-2711A.
LRH-2	Limestone Reclaim Hopper 2	EDC	Not included in R13-2711A.
LRH-3	Limestone Reclaim Hopper 3	EDC	Not included in R13-2711A.
LBF-3	Limestone Belt Feeder 3	EDC	Not included in R13-2711A.
LBF-4	Limestone Belt Feeder 4	EDC	Not included in R13-2711A.
LBF-5	Limestone Belt Feeder 5	EDC	Not included in R13-2711A.
L-2	Limestone Reclaim Conveyor	*belt conveyor*	Listed under condition 9.1.1. Even though this source is located underground, this is not an underground mine operation. Therefore, the exemption at §60.670(a)(2) cannot be claimed.
L-3A	Limestone Transfer Conveyor	*belt conveyor*	Same comment as for Em. Unit ID# L-2 above.
GTT-3	Gypsum Transfer Tower (shared)	EDC	Not included in R13-2711A.
GTT-2	Gypsum/Limestone Transfer Tower (shared)	Transfer point of a *belt conveyor*	Listed under condition 9.1.1. This source contains a transfer point that is subject to §60.672(e). See discussion below regarding *Non-applicability for Gypsum Operations*.
L-3B	Limestone Transfer Conveyor	*belt conveyor*	Listed under condition 9.1.1.
LTT-1	Limestone Transfer Tower	Transfer point of a *belt conveyor*	Listed under condition 9.1.1. This source contains a transfer point that is subject to §60.672(e).
L-4	Limestone Transfer Conveyor	*belt conveyor*	Listed under condition 9.1.1.
L-5	Limestone Reversing Fill Conveyor	EDC	Not included in R13-2711A.
LDG-1	Limestone Diverter Gate	Integral to a	Listed under condition 9.1.1. This source is an

Em. Unit	Description	Affected Facility [1]	Comment
		Transfer point of a *belt conveyor*	integral part of a transfer point that is subject to §60.672(e).
DC-1	Limestone Day Silo 1	*storage bin*	Listed under condition 9.1.1.
DC-2	Limestone Day Silo 2	*storage bin*	Listed under condition 9.1.1.
DC-3	Limestone Day Silo 3	EDC	Not included in R13-2711A.
BM-1	Ball Mill 1	*grinding mill*	Listed under condition 9.1.1.
BM-2	Ball Mill 2	*grinding mill*	Listed under condition 9.1.1.
VBF-1	Gypsum Vacuum Belt Filter 1	NAF	Not listed at §60.670(a)(1).
VBF-2	Gypsum Vacuum Belt Filter 2	NAF	Not listed at §60.670(a)(1).
VBF-3	Gypsum Vacuum Belt Filter 3	NAF	Not listed at §60.670(a)(1).
G-1A	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-1B	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
GTT-1	Gypsum Transfer Tower	N/A	See *Non-applicability for Gypsum Operations.*
G-2A	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-2B	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-3	Gypsum Stackout Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
GPC	Gypsum Pipe Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
GTT-3	Gypsum Transfer Tower	N/A	See *Non-applicability for Gypsum Operations.*
G-3A	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-3B	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-4	Gypsum Stackout Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-4A	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-4B	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
ES-1	Eurosilo	N/A	See *Non-applicability for Gypsum Operations.*
G-5	Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
GPC-1	Gypsum Pipe Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
G-6	Reversing Gypsum Conveyor	N/A	See *Non-applicability for Gypsum Operations.*
GB-1	Gypsum Bin	N/A	See *Non-applicability for Gypsum Operations.*
GB-2	Gypsum Bin	N/A	See *Non-applicability for Gypsum Operations.*
GSP	Gypsum Storage Pile	N/A	See *Non-applicability for Gypsum Operations.*

1 – "NAF" means "not an affected facility" listed at §60.670(a)(1). "EDC" means "engineering design change" which indicates that the equipment has either been eliminated or removed from service. "N/A" means "not applicable".

Applicability and designation of affected facility

Applicability for Limestone Operations and No Exemptions Apply

It has already been demonstrated that the facility is not exempt from the provisions of Subpart OOO via §60.670(c). Other exemptions cannot be claimed either. First, the facility does not meet the criteria of §60.670(a)(2) since it is not an underground mine. Further, it is not without crushers or grinding mills above ground since it operates two (2) ball mills (Em. Unit ID# BM-1, BM-2) used to grind the non-metallic mineral limestone. Also, it is not characterized as a wet material processing operations, as defined in §60.671. The exemption of §60.670(b) cannot be claimed since neither NSPS Subparts F nor I apply to the facility. The exemption of §60.670(c)(3) cannot be claimed since the facility is not a common clay or pumice plant. None of the requirements under §§60.670(d)(1) through (3) are applicable in this case. Finally, §60.670(e) solidifies the fact that Subpart OOO is applicable to this facility, which was constructed after August 31, 1983.

Non-applicability for Gypsum Operations

Crushing or grinding of a nonmetallic mineral is part of the definition in §60.671 of a *non-metallic mineral processing plant*. The operations at Fort Martin that handle gypsum are not subject to 40 C.F.R. 60 Subpart OOO for this *nonmetallic mineral* because gypsum is not crushed or ground at the facility. Any equipment that handles both limestone and gypsum (e.g., GTT-2) would be subject to applicable Subpart OOO requirements for limestone handling, but not for gypsum handling. Therefore, there is a parenthetical note following GTT-2 in the listing of emission units under condition 9.1.1.

Standard for Particulate Matter (PM)

The requirements of §§60.672(a) through (f) are applicable to affected facilities at the site. §§60.672(a) and (b) refer to requirements in the subpart's Tables 2 and 3, respectively. Since the permittee's affected facilities were constructed in 2007, the applicable limits are for affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008. Therefore, only this applicable row of the subpart's Tables 2 and 3 are included in permit condition 9.1.1.(a) and 9.1.1.(b). Since the permittee does not use wet scrubbing devices, the language after the semicolon in the fourth row of Table 2 is deleted. Refer to permit condition 9.1.1.

For clarity, the language "40 C.F.R." has been added before any section number in the rule language. Similarly, language such as "this section" is replaced with the particular section to which the language is referring. These will be considered *Standard changes* for incorporating the rule language into the permit, and are incorporated into the following requirements and permit conditions.

Reconstruction

None of the stipulations under §§60.673(a) or (b) are applicable in this case; therefore, there is no permit condition regarding the reconstruction requirements.

Monitoring of operations

§60.674(a) is pertinent to wet scrubbing devices used to control emissions. Since the permittee does not use a wet scrubbing device to control particulate matter from the *Nonmetallic mineral processing plant* the monitoring of §60.674(a) is not applicable.

§60.674(b) applies to affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility. The permittee's facility was constructed in 2007; therefore, this monitoring does not apply.

§60.674(c) applies to any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions. The permittee's facility was constructed in 2007; therefore, this monitoring does not apply.

§60.674(d) is an alternative to §60.674(c), and applies to any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions. The permittee's facility was constructed in 2007; therefore, this monitoring does not apply.

§60.674(e) is an alternative to §60.674(c), and applies to any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA). The permittee's facility is not subject to the Lime Manufacturing NESHAP; therefore, this monitoring does not apply.

In summary, none of the monitoring requirements of 40 C.F.R. §60.674 are applicable to this facility.

Test methods and procedures

Rule Section	Title V Condition	Discussion
§60.675(a)	9.3.1.	No additional discussion.
§60.675(b)	9.3.2.	No additional discussion.
§60.675(c)	9.3.3.	No additional discussion.
§60.675(d)	9.3.4.	§60.675(d)(1) applies to a facility that commences construction, modification, or reconstruction on or after April 22, 2008. Since this facility was constructed in 2007, this requirement does not apply.
§60.675(e)	9.3.5.	No additional discussion.
§60.675(f)	None	The requirements of this section are used to demonstrate compliance with §60.676(d), which pertains to wet scrubbers. Since the permittee does not use a wet scrubbing device to control particulate matter from the *Nonmetallic mineral processing plant* the testing of §60.675(f) is not applicable.
§60.675(g)	9.3.6.	This is applicable since applicable requirement §60.675(d)(2) requires Method 9 testing.
§60.675(h)	None	This rule section is [Reserved].
§60.675(i)	9.3.7.	No additional discussion.

Reporting and recordkeeping

§60.676(a) does not apply since the permittee is not seeking to comply with §60.670(d).

§60.676(b) applies to owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008. Since the facility was constructed in 2007, this requirement does not apply.

§§60.676(c) and (d) apply to the initial performance test of a wet scrubber. Since the permittee does not use a wet scrubbing device to control particulate matter from the *Nonmetallic mineral processing plant* this requirement does not apply.

§60.676(e) applies to reporting under §60.676(d). Since §60.676(d) does not apply, neither is §60.676(e) applicable.

§60.676(f) requires reporting of all results of performance tests conducted to demonstrate compliance with standards set in §60.672 (permit condition 9.1.1.). This has been included in the permit as condition 9.5.1.

§60.676(g) applies to any wet material processing operation that processes saturated and subsequently processes unsaturated materials. The permittee's process is not a *wet material processing operation* as defined in §60.671; therefore, §60.676(g) is not applicable.

§60.676(h) waives the requirement to submit notification of the date construction in accordance with 40 C.F.R. §60.7(a)(1). There is no need to include this waiver as a permit condition because the permittee is not required to do anything in order to fulfill the requirement/waiver.

§60.676(i) requires notification of the actual date of initial startup of each affected facility. §60.676(i)(1) allows for one notification to be sent for multiple affected facilities that startup on the same day. Note that §60.676(i)(2) applies to portable aggregate processing plants. Since the permittee's facility is not portable, this requirement does not apply. Refer to permit condition 9.5.2.

§60.676(i) states the following:

> *The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.*

U.S. EPA has delegated enforcement authority to the State (WV DAQ) by approving the State's rule 45CSR16 *Standards of Performance for New Stationary Sources*. Thus, according to §60.676(i), the affected facility is relieved of the obligation to comply with the reporting requirements of §60.676. However, 45CSR§16-4.1. states that "The Secretary hereby adopts and incorporates by reference the provisions of 40 CFR Parts 60 and 65, to the extent referenced in 40 CFR Part 60, including any reference methods, performance specifications and other test methods which are appended to these standards and contained in 40 CFR Parts 60 and 65, effective July 1, 2008, for the purposes of implementing a program for standards of performance for new stationary sources…." Further, Subpart OOO is not among the excluded NSPS regulations listed at 45CSR§16-4.1.b. Therefore, the permittee is subject to the reporting requirements of §60.676 by virtue of the fact that 45CSR16 is applicable.

§60.676(k) states that notifications and reporting required by Subpart OOO are only required to be submitted to the EPA Region or the State which has been delegated authority according to §60.4(b). Since authority has been delegated to the State, the reporting and notifications should be sent to DAQ. Refer to permit condition 9.5.3.

VII. **45CSR42 – *Greenhouse Gas Emissions Inventory Program.*** This rule applies to all facilities whose greenhouse gas emissions exceed the *de minimis* amount on an annual basis given at 45CSR§42-3.1., and which are required to report emissions of regulated air pollutants pursuant to W.Va. Code §22-5-4(a)(14). The permittee is required to report emissions pursuant to this section of W. Va. Code since it is cited for current permit condition 3.1.6. The permittee's facility is subject to reporting of greenhouse gases emitted above the *de minimis* amount in the years specified by the Secretary. Refer to permit conditions 3.1.16. and 3.5.11.

VIII. **Miscellaneous Revisions**

a. **Asbestos and 45CSR34**. The citation of authority for condition 3.1.3. was revised to match the more specific language of current Title V permits, and to include the state rule which now adopts 40 C.F.R. Part 61 NESHAPs.

b. **Orthographic Corrections and Omissions**. Several errors and omissions are corrected in the following places within the permit:
   i. In the company's name on the permit cover.
   ii. Near the end of the Table of Contents (i.e., Appendix D).
   iii. Between conditions 4.1.16. and 4.1.17.
   iv. Between conditions 4.4.1. and 4.4.2.

v. Omitted section symbol in the citations of authority for conditions 4.4.7., 5.1.1., 5.2.1., 8.1.2., and 8.1.3.
vi. In the title page for Appendix D.

c. **Stricken Language**. The language "45CSR16" is stricken from the citation of authority in condition 4.1.11. since the condition does not set forth a requirement from 40 C.F.R. Part 60.

Non-Applicability Determinations

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

1. **Particulate Matter Limits for BV-3 in Permit No. R13-2711A, Condition 4.1.1.** This underlying condition sets particulate matter limits for the bin vents of the three Limestone Day Silos. With the revision of R13-2711 and issuance of R13-2711A, the third Limestone Day Silo (Em. Unit ID# DC-3) was eliminated (*cf.* Engineering Evaluation and Emission Units table for permit R13-2711A). Therefore, the limits for BV-3 are not applicable, and permit condition 7.1.1. has been revised.

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: August 6, 2010
Ending Date: September 7, 2010

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

Denton B. McDerment, P.E.
Title V Permit Engineer
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 B. McDerment, P.E.
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 (Statement of Basis)

Public Comments

On September 7, 2010, Mr. Mark Sowa (Manager, Air Quality for the permittee) submitted the comment captured in the text box below via electronic mail to this writer.

> **7.3. Testing Requirements**
>
> 7.3.1. From May 1 through October 30 of each year the permittee will perform weekly visible emissions observations of the fugitive dust control systems. If any visible emissions are observed, then VE readings are to be taken in accordance with USEPA Method 9. Records of the weekly observations and any VE readings taken shall be maintained on site for a period of not less than five (5) years. The records shall be certified and made available to the Director or a duly authorized representative of the Director upon request.
>
> **[45CSR13, R13-2711, 4.3.1]**
>
> 7.3.2 From November 1 through April 30 of each year the permittee will perform monthly visible emissions observations of the fugitive dust control systems. If any visible emissions are observed, then VE readings are to be taken in accordance with USEPA Method 9. Records of the monthly observations and any VE readings taken shall be maintained on site for a period of not less than five (5) years. The records shall be certified and made available to the Director or a duly authorized representative of the Director upon request.
>
> **[45CSR13, R13-2711, 4.3.2]**
>
> The reason for the change is as follows:
>
> 1) It does not seem to be a productive use of time or protective of the environment to conitnuously record VE readings of zero whenever there are no visible emissions present at these locations. With the changes noted above, we would still inspect these areas for visible emissions at the same frequency, and would perform method 9 VE readings at any time when visible emissions are detected. Documentation of the absence of visible emissions will be recorded on the weekly and monthly inspection forms and a seperate method 9 VE form will be kept for any VE readings that are taken. The presence of visible emisisons will also be a trigger for corrective actions to be taken. An initial set of VE readings will be performed for all affected facilities and will be kept on-site as a baseline.

DAQ Response to Comment:

The requested change cannot be made as part of this permitting action for the following reasons:

1. The requested changes were not within the scope of the application submitted for this significant modification.

2. The requested changes are a relaxation of monitoring required by underlying permit R13-2711A.

3. The requested changes are a substantial change to a requirement of an underlying permit.

4. The requested changes were not included in the public and U.S. EPA review for this significant modification.

No other public comments were received.

U.S. EPA Comments

No comments were received from U.S. EPA.

Other Changes

Permit condition 3.1.11. requires the permittee to submit a Part 1 112(j) "equivalent emission limitation by permit" application for case-by-case MACT determination containing the information required in 40 C.F.R. §63.53(a), after July 15, 2010 but no later than August 15, 2010." In their letter of August 13, 2010, the permittee submitted a Section 112(j) "MACT Hammer" Part 1 application for Fort Martin Power Station as required by condition 3.1.11. After the renewal permit was issued, DAQ changed the MACT 112(j) Hammer "boilerplate" condition (not in Fort Martin's permit, but as a "boilerplate" condition for future permits where applicable) from a specific due date period to being due "within thirty (30) days of the date for a final rule specified in the final order of the United States District Court for the District of Columbia, which is currently December 16, 2010." Thus, the date that the rule is finalized would determine the Part 1 application due date. In this case, since the permittee has already submitted the Part 1 application, the new boilerplate language will be added to condition 3.1.11., but will be tailored for this particular case. That is, the requirement for a Part 1 application within 30 days of the final rule will be conditioned upon whether or not the applicable requirements of the final rule would require a change of, or addition to, the information already submitted in the 8/13/2010 Part 1 application. To simply change the language to the current "boilerplate" without crafting it for this case would produce a redundant permitting requirement, and would not capture the details of this particular case. Refer to permit condition 3.1.11. for the change.