# **Fact Sheet**



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

Permit Number: **R30-06100027-2014**Application Received: **May 28, 2013**Plant Identification Number: **03-054-06100027**Permittee: **Morgantown Energy Associates** 

Mailing Address: 555 Beechurst Avenue, Morgantown, WV 26505

Revised: N/A

Physical Location: Morgantown, Monongalia County, West Virginia

UTM Coordinates: 589.20 km Easting • 4,388.10 km Northing • Zone 17

Directions: From Charleston take Interstate 79 North to Exit 152. Bear right onto

Fairmont Rd (US-19) approximately 1.9 miles. Turn right onto Holland Ave. (US-19) approximately 1.4 miles to University Avenue. Turn left on Beechurst Ave. Facility is located on the left approximately 0.8

miles.

# **Facility Description**

The Morgantown Energy Facility is a fossil fuel fired cogeneration facility and operates under SIC code 4911. The facility consists of two (2) 375 MMBtu/hr waste coal and coal fired circulating fluidized bed (CFB) boilers and related facilities, including a steam transmission line and two (2) 132 MMBtu/hr auxiliary natural gas-fired boilers. Each CFB boiler is rated at 280,000 lb/hr of steam at 1500-psi and 950°F, and is capable of 294 KPPH. Gross generation is normally 57 to 59 MW, with an export of 50 MW to the grid. Thus, 7 to 9 MW of generation is internally used. Combined operation of the CFB and auxiliary boilers occurs occasionally. Typically, combined operation occurs when one CFB boiler is taken off-line for maintenance causing one or both auxiliary boilers to be brought on-line. Combined operation may also occur during periods of high steam demand from West Virginia University. When this occurs, combined operation consists of both CFBs being on-line as well as one or both auxiliary boilers. It is also occasionally necessary to take both CFBs off-line. The auxiliary boilers are brought on-line in this situation to meet the steam demand for West Virginia University. Other supporting operations include coal handling, limestone handling, and ash handling, as well as various 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.

# **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2012 Actual Emissions <sup>1</sup>
Carbon Monoxide (CO)	558.5	206.92
Nitrogen Oxides (NO <sub>X</sub> )	1,314	910.030
Lead (Pb)	0.57 5	0.008
Particulate Matter (PM <sub>2.5</sub> )	75.5 <sup>2</sup>	61.82 4
Particulate Matter (PM <sub>10</sub> )	82.5 <sup>2</sup>	68.03 <sup>4</sup>
Total Particulate Matter (TSP)	100.3 5	75.708
Sulfur Dioxide (SO <sub>2</sub> )	1,248	908.750
Volatile Organic Compounds (VOC)	32.9	5.38
Hazardous Air Pollutants	<b>Potential Emissions</b>	2012 Actual Emissions <sup>1</sup>
Hydrogen Chloride (HCl)	24.0	22.24 <sup>3</sup>
Hydrogen Fluoride (HF)	1.752	0.179
Antimony (Sb)	0.0049	0.004570 3
Arsenic (As)	0.0088	0.002266
Beryllium (Be)	0.0009	0.000064
Cadmium (Cd)	0.0018 5	0.000552
Chromium (Cr)	0.0058 3	0.003928 3
Cobalt (Co)	0.0008 5	0.000683
Manganese (Mn)	0.0095 3	0.008424 3
Mercury (Hg)	0.0920	0.002924
Nickel (Ni)	0.0048 5	0.002543
Selenium (Se)	0.0016 <sup>3</sup>	0.001424 <sup>3</sup>
Total organic HAP	4.1 2	1.90
Regulated Pollutants other than Criteria and HAP	Potential Emissions	2012 Actual Emissions <sup>1</sup>
Radionuclides	0.0039	0.00380

<sup>&</sup>lt;sup>1</sup> With the exceptions of HCl, Sb, Cr, Mn, and Se, the actual emissions are transcribed from the 2013 Certified Emissions Statement Invoice, and represent emissions from January 1, 2012 through December 31, 2012.

<sup>&</sup>lt;sup>2</sup> According to items #2 and #3 in 9/25/2013 technical correspondence received from the permittee.

According to item #4 in 9/25/2013 technical correspondence received from the permittee.

<sup>&</sup>lt;sup>4</sup> According to item #2 in 10/15/2013 technical correspondence received from the permittee.
<sup>5</sup> According to Attachment 2 in 9/25/2013 technical correspondence received from the permittee.

This facility has the potential to emit equal to or greater than 100,000 tons per year of carbon dioxide equivalent (CO<sub>2</sub>e) and 100 tons per year of greenhouse gases (GHGs) on a mass basis.

# **Title V Program Applicability Basis**

Federal and State:

This facility has the potential to emit 558.5 tpy of CO; 1,314 tpy of  $NO_x$ ; 1,248 tpy of  $SO_2$ ; and 24.0 tpy of HCl. 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, over 25 tons per year of aggregate HAPs, and over 100,000 tons per year of carbon dioxide equivalent and 100 tons per year of greenhouse gases on a mass basis, Morgantown Energy Associates 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:

45CSR2	PM from indirect heat exchangers
45CSR6	Open burning prohibited.
45CSR10	Prevent and Control Air Pollution from the
	Emissions of Sulfur Oxides
45CSR11	Standby plans for emergency episodes.
45CSR13	Permits for Construction, Modification,
	Relocation and Operation of Stationary
	Sources
45CSR14	Permits for Construction and Major
	Modification, of Major Stationary Sources
	of Air Pollution for the Prevention of
	Significant Deterioration
45CSR16	Standards of Performance for New
	Stationary Sources Pursuant to 40 CFR Part
	60
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
	information such as annual emission
	inventory reporting.
45CSR30	Operating permit requirement.
45CSR34	Emission Standards for HAPs
40 C.F.R 60, Subpart Da	Standards of Performance for Electric
	Utility Steam Generating Units
40 C.F.R 60, Subpart Db	Standards of Performance for Industrial-
	Commercial-Institutional Steam Generating
	Units
40 C.F.R 60, Subpart Y	Standards of Performance for Coal
-	Preparation Plants
40 C.F.R. Part 61	Asbestos inspection and removal
40 C.F.R. 63 Subpart DDDDD	Boiler MACT for Major Sources of HAP
40 C.F.R. 63 Subpart UUUUU	Utility Mercury and Air Toxics (MATS)
-	MACT
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
40 C.F.R. Part 64	Compliance Assurance Monitoring (CAM)
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State Only:	45CSR4	No objectionable odors.
	45CSR39	CAIR NO <sub>x</sub> Annual Trading Program
	45CSR40	CAIR NO <sub>x</sub> Ozone Season Trading Program
	45CSR41	CAIR SO <sub>2</sub> Trading Program

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	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-1085B/R14-7B	April 20, 1993	

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**

I. 40 C.F.R. 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. Morgantown Energy Facility is a major source of HAP because it has potential emissions in excess of 25 tpy for total HAP and/or potential emissions in excess of 10 tpy for any individual HAP. Therefore, 40 C.F.R. Part 63, Subpart DDDDD potentially applies to both the CFB boilers and the auxiliary boilers. The CFB boilers are not subject to the Boiler MACT rule per 40 C.F.R. §63.7491(a) because they are electric utility steam generating units (EGUs) covered by Subpart UUUUU of Part 63 (see Section II. of this Fact Sheet below). The non-EGU auxiliary boilers are considered existing affected units under Subpart DDDDD because construction commenced on these units prior to June 4, 2010 and they have never been reconstructed (cf. §§63.7490(b) through (d)). It should be noted that MEA has submitted a timely initial notification to WVDEP in accordance with 40 C.F.R §63.7545(b) indicating that the auxiliary boilers are subject to the Boiler MACT regulation.

The auxiliary boilers fire only natural gas fuel and thus are considered to be part of the "Units designed to burn gas I fuels" subcategory of affected units as defined in 40 C.F.R. §63.7575 and specified in §63.7499(1). Each of the units have a maximum design heat input of 132 MMBtu/hr. The boilers are not equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio (according to item #5 of 9/25/2013 technical correspondence received from the permittee). Gas 1 units are subject to a work practice standard under Subpart DDDDD that requires an annual tune-up in lieu of emission limits. An annual compliance report must be submitted to USEPA and WVDAQ documenting the results of the tune-up. In addition, the facility must conduct a one-time Energy Assessment of the auxiliary boilers in accordance with Table 3 of the regulation.

Table DDDDD below lists the sections of Subpart DDDDD and their applicability (and non-applicability where necessary) to the auxiliary boilers, and discusses how applicable requirements are incorporated into the renewal operating permit.

# **Table DDDDD**

Subpart DDDDD Section	Title V	Discussion
§63.7495(b)	4.1.10.	The applicable compliance date requirement for existing sources is included in the renewal permit, which is January 31, 2016. The substantive requirements for the auxiliary boilers are the annual tune-up and one-time energy assessment (cf. discussion below of §63.7500(a)), which must be complete no later than this date in accordance with §63.7510(e) (also discussed below).
§63.7495(d)	None	This section references the notification requirements in §63.7545. In particular, the requirements of §63.7545(b) are applicable, and the permittee has submitted the initial notification accordingly. Since at the time of this renewal the 120-day period after January 31, 2013 has passed, and there are no on-going requirements in this section, no permit condition is required.
§63.7500(a)	4.1.11. 4.1.12.	Work Practice Standards:  §63.7500(a)(1) requires the permittee to meet each limit and standard in Tables 1 through 3, and 11 through 13 of Subpart DDDDD. However, while burning gas 1, the units are not subject to the emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4 in accordance with the last sentence in §63.7500(e) (discussed below). Therefore, only Table 3 work practice standards must be examined for burning gas 1. Item #3 of Table 3 is applicable to the units, which requires an annual tuneup (condition 4.1.11.). Additionally, the one-time energy assessment prescribed in item #4 of Table 3 is applicable since the units are existing; are located at a major source of HAP; and are not limited use units (condition 4.1.12.). According to 9/25/2013 technical correspondence, the units have a combined heat input capacity less than 0.3 trillion Btu (TBtu) per year. Therefore, Section (1) of the definition of Energy assessment in §63.7575 is applicable. In order to specify this applicable definition, and its corresponding substantive requirement, the last sentence of item #4 in Table 3 is revised from:  The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in 40 C.F.R. §63.7575:  to incorporate the applicable definition and thus reads:  The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site
		the evaluation for items a. to e. appropriate for the on-site technical hours listed in applicable section (1) of the definition of Energy assessment in 40 C.F.R. §63.7575: The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity of less than 0.3 trillion Btu (TBtu) per year will be 8 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, process heat, or electricity) production, as applicable, will be evaluated to

Subpart DDDDD Section	Title V	Discussion
Section		identify energy savings opportunities, within the limit of
		performing an 8-hour on-site energy assessment.
	4.1.13.	General Duty Requirement The requirement in §63.7500(a)(3) is applicable and is therefore
		included in the permit as condition 4.1.13.
§63.7500(b)	None	The application does not mention any request (or intent to request) alternative work practice standards; therefore, this requirement is
		not applicable.
§63.7500(c)	None	This requirement is not applicable to the units since they are not limited use boilers.
§63.7500(d)	None	This requirement is not applicable to the units since they have a
		design heat input (DHI) greater than 5 MMBtu/hr and are not in either the Gas 2 or light liquid fuel subcategories.
§63.7500(e)	None	The units do not qualify for the ranges of design heat input (DHI) in this requirement. However, this requirement does provide that while burning gas 1, the units are not subject to the emission limits in
		Tables 1 and 2 or 11 through 13, or the operating limits in Table 4, which has already been considered in the discussion of §63.7500(a).
§63.7500(f)	None	This section requires compliance with the standards at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with
		Table 3 to Subpart DDDDD. However, the startup and shutdown requirements of Table 3 (items #5 and #6) are not applicable since
		they pertain to standards in Tables 1 or 2 or 11 through 13 of Subpart DDDDD. Moreover, the requirement to conduct a tune-up and energy assessment is not affected whether the units are
		normally operating, or are in startup or shutdown. Thus, this section of the regulation does not apply.
§63.7505(a)	4.1.11. 4.1.12.	This section requires compliance with the emission limits, work practice standards, and operating limits in Subpart DDDDD. The section is cited with the conditions for work practice standards.
§63.7510(e)	4.1.11.	This section states that the annual tune-up and one-time energy
	4.1.12.	assessment must be complete before the compliance date. Thus, language from this section is added at the end of conditions 4.1.11. and 4.1.12.
§63.7530(a)	None	This section regarding initial performance tests and fuel analyses is not applicable since the boilers are not subject to emission limits.
§63.7530(b)	None	This section regarding performance testing and fuel analyses is not applicable since the boilers are not subject to emission limits, and
		thereby are not subject to Subpart DDDDD testing and fuel analyses.
§63.7530(c)	None	This section regarding fuel analyses is not applicable since the boilers are not subject to emission limits.
§63.7530(d)	4.5.7.	This section is applicable since the units are in the <i>Unit designed to burn gas 1 subcategory</i> . A parenthetical reference to the permit
§63.7530(e)	4.5.8.	condition for the annual tune-up is included.  This applicable requirement is included in the permit with a
333.7333(0)		parenthetical reference to the permit condition for the one-time energy assessment.
§63.7530(f)	4.5.9.	This requirement states the NOCS must contain the results of the initial compliance demonstration according to §63.7545(e). Since
		the boilers are not subject to initial compliance demonstration using
		either performance testing or fuel analyses according to §63.7530, only the last sentence in §63.7545(e) is applicable to the boilers,

Subpart DDDDD	(E)14.1 X7	T
Section	Title V	Discussion
		which is: "If you are not required to conduct an initial compliance
		demonstration as specified in §63.7530(a), the Notification of
		Compliance Status must only contain the information specified in paragraphs (e)(1) and (8)." However, only items (1), (7), and (8) are
		applicable since the units are not subject to emission limits; are not
		subject to performance testing or fuel analyses; and do not utilize
		CEMS. Note that §63.7545(e)(6) is not necessary since it is
		covered by the more specific applicable requirements in
		§63.7545(e)(8). Also, §63.7545(e)(8)(iii) is not applicable since the
		boilers burn only natural gas and do not combust secondary
		materials that are solid waste. However, §63.7545(e)(7) is applicable since any deviations from the applicable work practice
		standards must be reported in the NOCS. Finally, the deadline to
		submit the NOCS is included pursuant to §63.9(h)(2)(ii), and
		language "to the Director (and a copy to U.S. EPA)" is added since
		§63.9(a)(4)(ii) is applicable.
§63.7533	None	The boilers are not complying using the alternative equivalent
§63.7535	None	output-based emission limits.  The boilers are not subject to a Subpart DDDDD requirement to
803.1333	TAOHE	monitor and collect data pursuant to this section.
§63.7540(a)(10)	4.1.11.	The annual frequency for tune-ups in this section is applicable since
		the boilers are greater than 10 MMBtu/hr.
§63.7540(a)(11)	None	This section does not apply since the boilers are greater than 10
0.52.77.10( )(1.2)		MMBtu/hr heat input.
§63.7540(a)(12)	None	This section does not apply since the boilers are greater than 10 MMBtu/hr heat input and are not equipped with a continuous
		oxygen trim system that maintains an optimum air to fuel ratio.
§63.7540(a)(13)	4.1.11.	This requirement allows a 30-day delay for the tune-up if the unit is
		not operating the day the tune-up is scheduled. Since this pertains to
		the tune-up it is written with condition 4.1.11.
§63.7540(b)	4.5.10.	The purpose of this requirement is to report deviations to applicable
		requirements. While the requirement reads that it pertains to emission limits and operating limits (to which the units are not
		subject), it also pertains to those requirements in Tables 1 through 4
		or 11 through 13. The units are subject to work practice standards in
		Table 3 (conditions 4.1.11. and 4.1.12.). Therefore, the condition
		has been written to refer to work practice standards in Table 3.
§63.7540(c)	None	This section is not applicable since the boilers are not subject to
§63.7540(d)	None	Subpart DDDDD mercury limitations or standards.  This section is not applicable since item #5 in Table 3 applies to
303.13 TO(U)	TOIL	units subject to emission limits in Table 1 or 2 or 11 through 13 to
		Subpart DDDDD, to which the boilers are not subject.
§63.7545(a)	4.5.9.	§§63.7(b) and (c) are not applicable since the boilers are not subject
		to Subpart DDDDD performance testing.
		\$63.8(e) is not applicable since no CMS is utilized.
		§§63.8(f)(4) and (6) are not applicable since neither an alternative monitoring method, nor an alternative to the relative accuracy test is
		utilized.
		Among §§63.9(b) though (h), only the NOCS requirement of
		§63.9(h) is applicable. Therefore, this section is cited in condition
8.60.75.45.4	N.T.	4.5.9.
§63.7545(b)	None	This operating permit renewal is past the 120-day period after January 31, 2013; therefore, no permit condition is required.
§63.7545(c)	None	This section is not applicable since the boilers were constructed
300010(0)	1,0110	prior to January 31, 2013.

Subpart DDDDD Section	Title V	Discussion
§63.7545(d)	None	This section is not applicable since the boilers are not subject to a
		Subpart DDDDD performance testing requirement.
§63.7545(e)	4.5.9.	This requirement has been discussed under §63.7530(f).
§63.7545(f)	None	This requirement is not applicable since the permittee does not intend to use a fuel other than natural gas.
§63.7545(g)	None	This section is not applicable since the boilers will not combust solid waste.
§63.7545(h)	None	This requirement is not applicable since the permittee does not combust any fuel other than natural gas in the auxiliary boilers.
§63.7550(a)	4.5.11.	This section points to Table 9 of Subpart DDDDD, which requires a compliance report. The requirements in Table 9 are based on items that can vary as to applicability. Therefore, the condition is written based on applicable requirements in Table 9. Non-applicable language (e.g., emission limits, operating limits, and CMS-related) is excluded from the condition. Furthermore, since the boilers are subject to the annual frequency for tune-ups, the compliance report frequency will be submitted at the same frequency.
\$63.7550(b)	4.5.11.	The requirements of this section are referenced by §63.7550(a), Table 9. Since the units are on an annual tune-up frequency, the applicable language of §63.7550(b)(1) through (4) are included in condition 4.5.11.
§63.7550(c)	4.5.11.a.	The requirements of this section are referenced by \$63.7550(a), Table 9. Only certain sections of the requirements in \$63.7550(c)(1) through (5) are applicable. Requirement \$63.7550(c)(2) is not applicable since fuel analyses is not utilized. Requirement \$63.7550(c)(3) is not applicable since there are no applicable emission limits and performance testing is not utilized. Requirement \$63.7550(c)(4) is not applicable since there are no applicable emission limits and a CMS is not utilized. Only \$63.7550(c)(1) is applicable, which references \$63.7550(c)(5).
§63.7550(d)	None	This section is not applicable since the boilers are not subject to Subpart DDDDD emission limits.
§63.7550(e)	None	This section is not applicable since the boilers are not subject to Subpart DDDDD emission limit, operating limit, or CMS requirement.
§63.7550(f)	None	This section is reserved.
§63.7550(g)	None	This section is reserved.
§63.7550(h)(1)	None	This requirement is not applicable since no Subpart DDDDD performance test is required.
§63.7550(h)(2)	None	This requirement is not applicable since no CEMS is utilized or required by Subpart DDDDD.
§63.7550(h)(3)	4.5.11.	Since this requirement pertains to the report required by Table 9 of Subpart DDDDD, then it is also written with the compliance report condition 4.5.11.
§63.7555(a)	4.4.5.	This applicable recordkeeping requirement is set forth as a permit condition.
§63.7555(b)	None	This section is not applicable since CEMS, COMS, and CMS are not utilized.
§63.7555(c)	None	None of the requirements in this section, or Table 8 that it references, are applicable since the boilers are not subject to emission limitations and are not equipped with air pollution control devices.
§63.7555(d)	None	This section is not applicable since the boilers are not subject to emission limitations and operating limitations in Tables 1, 2, or 11 through 13 of Subpart DDDDD.

Subpart DDDDD Section	Title V	Discussion
§63.7555(e)	None	This section is not applicable since the boilers are not subject to emission limitations, and thus emissions averaging is not applicable.
§63.7555(f)	None	This section is not applicable since efficiency credits are not being utilized.
§63.7555(g)	None	This section is not applicable since the units are not required to meet the specification for mercury.
§63.7555(h)	None	This section is not applicable since the units will not use an alternative fuel other than natural gas.
§63.7555(i)	4.4.6.	This applicable recordkeeping requirement is set forth as a permit condition.
§63.7555(j)	4.4.7.	This applicable recordkeeping requirement is set forth as a permit condition.
§63.7560	4.4.8.	These applicable recordkeeping requirements are set forth as a permit condition.

Other requirements in Subpart DDDDD not addressed in the table above are not applicable to the units for one or more of the following reasons:

- The units are not new or reconstructed, as these terms are specified in §§63.7490(b) and (c).
- The units are not subject to pollutant emission limits pursuant to 40 C.F.R. 63 Subpart DDDDD.
- The units are not EGUs.
- The units are not equipped with an add-on air pollution control device.
- The fuel subcategory for the requirement does not apply to the units.
- The heat input range for the requirement does not apply to the units.
- The units are not limited-use, as this term is defined in §63.7575.
- The units do not combust another gas 1 fuel.
- The units do not utilize a CEMS to comply with any Subpart DDDDD requirement.
- II. 40 C.F.R. Part 63, Subpart UUUUU National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units. This regulation, also known as the "Utility Mercury and Air Toxics (MATS)" rule, applies to coal- and oil-fired EGUs as defined in §63.10042 of 40 C.F.R. Part 63. The Utility MATS rule establishes national emission limitations and work practice standards for HAP, as well as requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. Existing affected sources must comply with the requirements of Subpart UUUUU no later than April 16, 2015 (cf. §63.9984(b)).

#### Affected Boilers & Applicable Emission Standards

The auxiliary boilers (S009L, S009M) are not fired by coal or oil and do not generate electricity; therefore these units meet neither the definition of EGU in §63.10042, nor the the applicability criteria of §63.9981. The CFB boilers (S009J, S009K) at the Morgantown Energy Facility cogenerate steam and electricity and supply more than one-third of their potential electric output capacity and more than 25 MWe output to a utility power distribution system for sale. Hence, the CFB boilers meet the definition of EGU in §63.10042 and are subject to Subpart UUUUU. The CFB boilers are considered existing affected units under Subpart UUUUU because construction commenced on these units prior to May 3, 2011 and they have never been reconstructed (cf. §63.9982(d)). The CFB boilers do not meet any of the exemption in §63.9983. It should be noted that MEA has submitted a timely initial notification to WVDAQ in accordance with 40 C.F.R §63.10030(b) indicating that the CFB boilers are subject to the Utility MATS rule.

The CFB boilers do not fire non-agglomerating virgin coal and hence by definition these units are considered part of the "*Unit designed for coal* > 8,300 Btu/lb" subcategory of affected units as defined in 40 C.F.R. §63.10042 and specified in §63.9990(a)(1). This subcategory is subject to emission limits for the following pollutants per Table 2 of Subpart UUUUU:

- Particulate matter or total non-mercury HAP metals or individual HAP metals
- Hydrogen chloride or sulfur dioxide
- Mercury

In addition to emission limits, the regulation also mandates work practice standards that require a periodic tune-up of the burner and combustion controls and impose certain startup and shutdown requirements. A semi-annual report must be submitted to USEPA and WVDAQ documenting compliance with the requirements and containing other information as specified in the rule.

#### Compliance Approach

To the extent possible since the compliance date is yet future, the permittee has proposed specific language for new Title V permit conditions incorporating the applicable Subpart UUUUU requirements in Appendix 2 of the renewal application. The proposed language was worded so as not to preclude any available compliance options. The compliance approach for each specific pollutant and work practice standard is examined below.

#### Filterable Particulate Matter (PM)

According to Appendix 2 of the renewal application, the permittee has elected to comply with the 0.030 lb/MMBtu filterable particulate matter (PM) limitation (rather than Total non-Hg HAP metals, or Individual HAP metals). The permittee intends that if the results of the initial performance test indicate that the CFB boilers qualify for low emitting EGU (LEE) status, then the permittee must conduct a performance test at least every 36 calendar months to demonstrate continued LEE status. Should subsequent emissions testing results show the CFB boilers do not meet the LEE eligibility requirements, then the permittee must conduct emissions testing quarterly, except as otherwise provided in §63.10021(d)(1). However, if the CFB boilers do not initially qualify as LEE for PM, then compliance with the PM limit must be demonstrated through an initial performance test and the permittee must monitor continuous performance through either use of a particulate matter continuous parametric monitoring system (PM CPMS), a PM CEMS, or a compliance performance testing repeated quarterly.

#### Sulfur Dioxide (SO<sub>2</sub>)

According to Appendix 2 of the renewal application, the permittee has elected to comply with the 0.20 lb/MMBtu sulfur dioxide ( $SO_2$ ) limitation (rather than HCl) using  $SO_2$  CEMS (which is the only compliance method for  $SO_2$  as provided in Item #1 of Table 2 to Subpart UUUUU). The permittee currently operates an  $SO_2$  CEMS in accordance with permit condition 4.2.1. Also, the permittee utilizes limestone injection for flue gas desulfurization (FGD). However, there is no current permit condition that specifically requires the permittee to operate the FGD. The  $SO_2$  limitation may be used only if the FGD criteria in §§63.9991(c)(1) and (2) are met; therefore, as part of the condition for the  $SO_2$  limit will be the requirement to operate the FGD in accordance with §§63.9991(c)(1) and (2), which references §63.10000(b).

#### Mercury (Hg)

According to Appendix 2 of the renewal application, the permittee has elected to comply with the 1.2 lb/TBtu mercury (Hg) limitation using LEE testing in §63.10005(h). The permittee intends that if the results of the initial performance test indicate that the CFB boilers qualify for low emitting EGU (LEE) status, then the permittee must conduct a 30-day performance test using EPA Method 30B at least once every 12 calendar months to demonstrate continued LEE status. Should subsequent emissions testing results show the CFB boilers do not meet the LEE eligibility requirements, then the permittee must install, certify, maintain, and operate a Hg CEMS or a sorbent trap monitoring system in accordance

with Appendix A to Subpart UUUUU within 6 calendar months of losing LEE eligibility. Until the Hg CEMS or sorbent trap monitoring system is installed, certified, and operating, the permittee must conduct Hg emissions testing quarterly, except as otherwise provided in §63.10021(d)(1). However, if the CFB boilers do not initially qualify as LEE for Hg, then initial and continuous compliance with the Hg limit must be demonstrated through use of a Hg CEMS or sorbent trap monitoring system in accordance with Appendix A to Subpart UUUUUU.

#### Work Practice Standard for Tune-up of Burner & Combustion Controls

The permittee will conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months as specified in 40 C.F.R. §63.10021(e). The initial tune-up will be completed no later than October 12, 2015 (i.e., 180 days after April 16, 2015, compliance date).

#### Work Practice Standard for Startup & Shutdowns

The permittee will operate all continuous monitoring systems for the CFB boilers during periods of *startup* and *shutdown* as those terms are defined in 40 C.F.R. §63.10042. During startup of a CFB boiler, natural gas must be used for ignition. Once coal (including waste coal) is fired, all of the applicable control technologies must be engaged. During shutdown of a CFB boiler, the permittee must operate all applicable control technologies while firing coal. The permittee must comply with all applicable emissions limits at all times except for periods that meet the definitions of startup and shutdown. All applicable requirements of Items #3 and #4 of Table 3 to Subpart UUUUU will be adhered to.

#### Incorporation of Applicable Requirements into the Title V Permit

Applicable requirements of Subpart UUUUU will be incorporated into the operating permit based upon U.S. EPA's Title V Permit Writing Guidance provided at <a href="http://www.epa.gov/reg3artd/permitting/t5">http://www.epa.gov/reg3artd/permitting/t5</a> iar.htm (accessed by this writer on July 23, 2013). Based upon this guidance, all applicable limits, standards, compliance and performance testing requirements, monitoring, recordkeeping, and reporting requirements will be written in the permit. Moreover, in adherence to the guidance, test methods, inspection and maintenance plans, and calculation methods/equations needed to determine compliance, can and will be incorporated by reference (IBR) as applicable. Compliance options will be addressed in accordance with the guidance as well. In particular, the guidance states:

Many MACT standards contain more than one compliance option (e.g., source can choose to comply via use of a carbon adsorber or a thermal oxidizer). For simplicity and precision, the Title V permit should include only the compliance option selected by the source -- if the source has already selected a compliance option (which usually depends on the due dates for initial notification/initial performance tests). If the source desires flexibility to switch to another compliance option, the permit could IBR an alternative compliance option(s) (e.g., as an alternative operating scenario), but the associated monitoring, recordkeeping, reporting requirements also must be addressed in the permit.

Compliance with the elected alternate  $SO_2$  limitation is demonstrated via CEMS only per the regulation; therefore, no optional compliance methods for  $SO_2$  must be IBR. Since the permittee has already elected compliance with the  $SO_2$  limitation, the HCl limit in Item #1 of Table 2 to Subpart UUUUU will neither be explicitly written in the permit, nor IBR.

According to the regulatory discussion in the renewal application the permittee has not finalized which compliance option will be utilized. However, according to suggested permit language in Appendix 2 of the application, the permittee intends to comply using LEE status for both PM and Hg. If test results indicate that the source does not qualify for LEE status, another compliance option must be used. Based upon the last statement in the U.S. EPA guidance stated above, and the suggested permit language provided by the permittee in the renewal application, the specifics regarding the LEE

compliance option will be explicitly written in the permit for both PM and Hg, while other available compliance options and their associated MRR requirements will be IBR as applicable. Should initial performance test results preclude use of the LEE compliance option, then another available compliance option will be utilized and the specific requirements pertaining to that option will be incorporated into the Title V permit using significant modification permitting procedures.

Using this approach, Table UUUUU below lists the sections of Subpart UUUUU and their applicability (and non-applicability where necessary) to the CFB boilers, and discusses how the applicable requirements are incorporated into the renewal operating permit.

**Table UUUUU** 

Subpart UUUUU Section	Title V	Discussion
§63.9984(b)	4.1.14.	The applicable compliance date for existing EGUs is set forth in the permit. As is typical for incorporation in the permit, the regulation language "this subpart" is replaced with "40 C.F.R. 63 Subpart UUUUUU".
§63.9984(f)	4.1.15.	This applicable requirement to demonstrate compliance within 180 days after the compliance date is set forth as a permit condition. Only the applicable paragraph (b) is included from the regulation language.
§63.9985	None	This section does not apply since the units are not new EGUs.
<b>Emission Limita</b>	tions and Wo	rk Practice Standards
§63.9991(a)(1)		This section requires compliance with applicable emission limits and work practice standards in Tables 1 through 3 to Subpart UUUUU.
	None	Table 1 Requirements in Table 1 are not applicable since the units are existing.
	4.1.16.	Table 2 Particulate Matter From Table 2, emission limits in Item #1 for coal-fired unit not low rank virgin coal are applicable. According to Appendix 2 of the renewal application, the permittee has elected to comply with the 0.030 lb/MMBtu filterable particulate matter (PM) limitation (rather than Total non-Hg HAP metals, or Individual HAP metals). This requirement references applicable requirements in Table 5 to Subpart UUUUU. According to suggested language in appendix A of the renewal application, the permittee will demonstrate compliance with the PM limitation using performance testing. Therefore, the PM performance testing requirements of item #1 in Table 5 are incorporated by reference (IBR).
	4.1.17.	Sulfur Dioxide Similar to the determination above regarding filterable PM, the permittee has elected to comply with the 0.20 lb/MMBtu sulfur dioxide (SO <sub>2</sub> ) limitation (rather than HCl) since it utilizes FGD technology and an SO <sub>2</sub> CEMS. Compliance demonstration via applicable requirements in Tables 5 and 7 to Subpart UUUUU are IBR.

Subpart UUUUU Sastian	Title V	Discussion
Section	4 4 4 -	
	4.1.18.	Mercury Similar to the determination above regarding filterable PM, the permittee has elected to comply with the 1.2 lb/TBtu mercury (Hg) limitation using LEE testing in §63.10005(h) (as per Appendix 2 of the renewal application).
		Table 3 In Table 3 items 1, 3, and 4 are applicable. Item 2 is not applicable since the boilers are existing.
	4.1.19.	For item #1, the 48-month frequency for neural network optimization is excluded since the permittee excluded it in the renewal application Appendix 2 and only mentioned the 36-month frequency.
	4.1.20.	For item #3, the startup requirements are included as a permit condition.
	4.1.21.	For item #4, the shutdown requirements are included as a permit condition. Note that the incorrect references in the regulation to "startup" in both of the last two sentences of item #4 are corrected to read as "shutdown".
		The last sentences of items #3 and #4 to Table 3 in Subpart UUUUU are identical (with exception of startup or shutdown), and read, "You must provide reports concerning activities and periods of startup, as specified in §63.10011(g) and §§63.10021(h) and (i)." However, there are no reports required by §63.10011(g) since it only refers back to applicable Table 3 requirements for demonstrating initial compliance. Similarly, there are no reports required by §63.10021(h) since it requires records as specified in §63.10032 during startup and shutdown (which are addressed below in this table). Finally, only §63.10021(i) requires reports, which are specified in §63.10032 concerning activities and periods of startup and shutdown. Therefore, the last sentence of conditions 4.1.20. and 4.1.21. is changed to "as specified in §63.10021(i) (condition 4.5.16.a.(1))" since this is the only requirement incorporated under §63.10031 to which this reporting requirement applies. See discussion below of §63.10021(i).
§63.9991(a)(2)	None	This section requires compliance with applicable operating limits in Table 4 to Subpart UUUUU, which is while using a PM CPMS to maintain the 30-day rolling average PM CPMS output at or below an established threshold. PM CPMS is not the initially elected compliance option for this renewal; therefore, there is no permit condition for this section of the regulation.
§63.9991(b)	None	This section is not applicable since the permittee is not requesting any alternative to the work practice standards in §63.9991.
\$63.9991(c)	4.1.17.	The section provides the criteria for electing to comply with the alternate SO <sub>2</sub> limit in Table 2. The permittee uses FGD technology on the units, and also operates an SO <sub>2</sub> CEMS. It may seem, then, that a permit requirement is unnecessary. However, \$63.9991(c)(2) requires operation of the FGD system consistent with \$63.10000(b), which is "At all times" Thus, this is an ongoing requirement which is written with the SO <sub>2</sub> limit in the permit condition. To ensure clarity that the FGD technology utilized by the permittee

Subpart UUUUU Section	Title V	Discussion
beetion		indeed qualifies for this requirement, language from the definition of
		Dry flue gas desulfurization technology in 40 C.F.R. §63.10042 i
		incorporated into 4.1.17.(1) and (2) indicating that the permittee'
		limestone injection meets the definition.
General Compli		
§63.10000(a)	4.1.16.	This section requires compliance with the emission limits and
	4.1.17.	operating limits in Subpart UUUUU. The section also require
	4.1.18. 4.1.20.	compliance with the startup and shutdown work practices in Table to Subpart UUUUU. Therefore, this section is cited in the liste
	4.1.20.	permit conditions. This section is not cited with the tune-up wor
	7.1.21.	practice standard, even though it is from Table 3, because this is no
		an emission limit, operating limit, or a startup or shutdow.
		requirement. This is a reasonable conclusion because §63.10000(a
		is "at all times" which does not apply to a tune-up that is conducte
		once every 36 months.
§63.10000(b)	4.1.22.	This general duty requirement is applicable; therefore, it is include
§63.10000(c)	4.3.13.	in the permit.
\$03.10000(C)	4.3.13.	This section requires initial performance testing to demonstrat compliance with applicable emission limits. §63.10000(c)(1
		specifies details regarding the LEE option, which in this case wi
		apply to both PM and Hg.
		Applicable requirements in §63.10000(c)(1) are written as a testin
		permit condition since neither of the exception
		§63.10000(c)(1)(i)(A) and (B) are applicable. Non-applicable language is excluded (e.g., solid oil-derived, IGCC units, etc.), and
		applicable pollutants are mentioned instead of "applicable emissio
		limits."
		Note that §63.10000(c)(1)(v) is not applicable since the permittee
		elected to comply with the applicable SO <sub>2</sub> limit instead of HCl. The explains why the lower-case roman numeral condition numbers d
		not include (v). This approach is taken to align with the applicable
		requirements in Subpart UUUUU, which are cited after th
		condition.
		Note that §63.10000(c)(2) is not applicable since the units are no
§63.10000(d)	None	liquid oil-fired.  This requirement applies to sources that "demonstrate compliance."
803.10000(a)	None	with any applicable emissions limit through use of a continuou
		monitoring system (CMS), where a CMS includes a continuous
		parameter monitoring system (CPMS) as well as a continuou
		emissions monitoring system (CEMS)" According to technical
		correspondence <sup>1</sup> , the permittee utilizes a CMS that is comprised of
		CEMS but no CPMS is used. Therefore, this requirement is no applicable.
		upplicable.
\$63.10000(e)	4.1.19	This section requires periodic tune-ups according to \$63 10021(e)
\$63.10000(e) \$63.10000(f)	4.1.19. None	This section requires periodic tune-ups according to \$63.10021(e).  The CFB boilers are EGUs and are subject to Subpart UUUUU
§63.10000(e) §63.10000(f)	4.1.19. None	This section requires periodic tune-ups according to §63.10021(e).  The CFB boilers are EGUs and are subject to Subpart UUUUU therefore, no permit condition is warranted.
		The CFB boilers are EGUs and are subject to Subpart UUUUU therefore, no permit condition is warranted.  The CFB boilers are EGUs and are subject to Subpart UUUUU
§63.10000(f)	None	The CFB boilers are EGUs and are subject to Subpart UUUUU therefore, no permit condition is warranted.

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<sup>&</sup>lt;sup>1</sup> Email received from the permittee on 9/25/2013.

Subpart UUUUU Section	Title V	Discussion	
§63.10000(h)	None	There is no reason to expect that the CFB boilers will not be EGUs subject to Subpart UUUUU on April 16, 2015; therefore, no permit condition is warranted.	
§63.10000(i)	None	The CFB boilers have operated as EGUs; therefore, no permit condition is warranted.	
§63.10000(j)	None	This section is not applicable since there are no newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of operations that cause your EGU to meet the definition of an EGU subject to Subpart UUUUU.	
§63.10000(k)	None	This section is not applicable for the same reason in discussion above concerning §63.10000(j).	
§63.10001	None	The affirmative defense section does not require the permittee to do anything at this time; however, it may be invoked in the future. Therefore, no permit condition is required.	
Testing and Initi	ial Complian	ce Requirements	
§63.10005(a)	4.3.14.	The applicable elements of the general requirements are written as a permit condition. The electrical output-based emission limit requirement of \$63.10005(a)(2)(ii) is not applicable since the permittee has elected to comply with the heat rate-based limit.	
§63.10005(b)	4.3.15.	The applicable elements of the performance testing requirements are written as a permit condition. Non-applicable language has been excluded for clarity and precision.	
§63.10005(c)	None	The permittee uses neither PM CPMS (at this renewal) nor are the EGUs oil-fired; therefore, this section does not apply.	
§§63.10005(d) and (d)(1)	4.3.16.	Since the permittee has elected to comply with the SO <sub>2</sub> limit, which must be demonstrated via SO <sub>2</sub> CEMS, §63.10005(d)(1) is applicable.	
		\$63.10005(d)(2) is not applicable since the permittee is not (at this renewal) using a PM CPMS.	
		\$63.10005(d)(3) is not applicable since the permittee is not (at this renewal) demonstrating initial compliance with the Hg limit using a Hg CEMS or sorbent trap monitoring system.	
		§63.10005(d)(4) is not applicable since the units are not liquid oil-fired.	
§63.10005(e)	4.1.19.	This section states that part of the initial compliance demonstration is to conduct a performance tune-up of the affected EGU. The substance of this requirement is in condition 4.1.19.; therefore, this section is cited with that condition.	
§63.10005(f)	4.1.15.	This applicable requirement specifically related to the tune-up is set forth with the 180-day period permit condition based upon \$63.9984(f). Language regarding sources with neural networks is excluded due to non-applicability.	
§63.10005(g)	None	This section is not applicable since the units are existing.	
§63.10005(h)	4.3.13.	This section is applicable for all pollutants from existing EGUs; therefore, the permittee may use this option. The elements of this section are details that will be IBR via the requirements of \$63.10000(c). In particular, this section is IBR in conditions 4.3.13.(i), (ii), and (iii).	
§63.10005(i)	None	This section is not applicable since the units do not fire liquid-oil fuel.	

Subpart UUUUU Section	Title V	Discussion
§63.10005(j)	4.1.20.,	These initial compliance demonstration requirements for startup and
	4.1.21.	shutdown are cited with the substantive requirements of §63.9991(a)(1).
§63.10005(k)	4.5.12.	This requirement is to submit the NOCS summarizing results of initial compliance demonstration, as provided in §63.10030(e).
\$63.10006(a)	None	For this renewal, the elected compliance option is not PM CPMS. If it should be required in the future (e.g., due to loss of LEE status), then this would become a requirement.
§63.10006(b)	4.3.13.(iii) 4.3.13.(ii)	§63.10006(b)(1) applies to LEE status for PM (in this case). §63.10006(b)(2) applies to LEE status for Hg.
§63.10006(c)	None	At the time of this renewal §63.10006(b) is applicable and PM CEMS will not be utilized to demonstrate compliance with a filterable PM emissions limit; therefore, §63.10006(c) does not apply. Further, this compliance demonstration option is IBR in condition 4.3.13.
§63.10006(d)	None	At the time of this renewal §63.10006(b) is applicable since an SO <sub>2</sub> CEMS will be utilized; therefore, §63.10006(d) does not apply.
§63.10006(e)	None	This section is not applicable since the units are not liquid oil-fired.
§63.10006(f)	None	This section applies to sources that "follow the requirements listed in paragraphs (g) and (h) of this section" According to technical correspondence <sup>2</sup> , the permittee does not intend to use §63.10006(g), but §63.10006(h) could potentially apply since the permittee is planning to demonstrate LEE status for Hg. Since the permittee will not follow paragraphs (g) and (h) of §63.10006, this requirement does not apply.
§63.10006(g)	None	According to technical correspondence <sup>3</sup> the permittee does not plan to use emissions averaging; therefore, this requirement as well as \$63.10009 are not applicable.
§63.10006(h)	4.3.26.	This section can be applied to a performance test for non-Hg LEE (PM in this case). Therefore, the potentially applicable requirement has been included in the renewal permit.
§63.10006(i)	4.1.19.	The requirement of \$63.10006(i)(1) is applicable since a neural network is not utilized. The applicable regulation language "each performance tune-upno more than 36 months after the previous" has been added at the end of the first paragraph in the permit condition.
§63.10006(j)	4.5.13.	This section requires reporting the results of performance tests and performance tune-ups within 60 days after their completion. The reports must contain all applicable information required in §63.10031.  The applicable information required in §63.10031 is discussed below in this table, and such requirements are set forth in the
§63.10007(a)	4.3.17.	renewal permit as condition 4.5.16. through 4.5.19.  This applicable performance testing requirement IBR certain sections of §63.7, and is written in the permit. In adherence to the U.S. EPA guidance document mentioned above, this applicable performance testing requirement is written in the permit (rather than IBR).

 $<sup>^2</sup>$  Email received from the permittee on 9/25/2013.  $^3$  Ibid.

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Subpart UUUUU Section	Title V	Discussion
§63.10007(a)(1)	4.3.18.	This requirement applies to the SO <sub>2</sub> CEMS that will be used to demonstrate compliance with the elected SO <sub>2</sub> limit. In adherence to the U.S. EPA guidance document mentioned above, this applicable performance testing requirement is written in the permit (rather than IBR).
\$63.10007(a)(2)	4.3.19.	For this renewal test methods will be used for demonstrating compliance with the PM and Hg limits (even under LEE status). Therefore, this requirement is included in the permit. In adherence to the U.S. EPA guidance document mentioned above, this applicable performance testing requirement is written in the permit (rather than IBR).
§63.10007(a)(3)	None	This section is not applicable since for this renewal the permittee does not intend to utilize a PM CPMS.
§63.10007(b)	4.3.20.	In adherence to the U.S. EPA guidance document mentioned above, this applicable performance testing requirement is written in the permit (rather than IBR). The reference in the condition to "Table 5" will be retained in order to IBR the applicable test methods and procedures contained in that table.
§63.10007(c)	None	This section is not applicable since for this renewal the permittee does not intend to utilize a PM CPMS.
§63.10007(d)	4.3.21.	In this case, the exception to this requirement is testing based on SO <sub>2</sub> CEMS; thus, the requirement is applicable to PM and Hg performance testing and is written in the permit.
§63.10007(e)	4.3.22.	This applicable requirement will be written in the permit, but the calculation methodologies in §§63.10007(e)(1) through (3) are IBR in keeping with the U.S. EPA guidance.
§63.10007(f)	4.3.23.	This applicable recordkeeping requirement will be kept in the testing subsection (4.3.) of the permit so that when this subsection is read it will be understood that such records must be kept.
§63.10008	None	This section of the regulation is reserved.
§63.10009	None	See discussion above concerning §63.10006(g).
\$63.10010(a)(1)	None	This requirement does not apply since there are two affected units, and this requirement applies to a single unit-single stack configuration.
\$63.10010(a)(2)	None	This requirement does not apply since there are non-affected units (i.e., auxiliary boilers S009L and S009M) that vent to the common stack STACK1.
§63.10010(a)(3)	4.2.11.	This monitoring requirement is applicable since it pertains to units utilizing a common stack with non-affected units. According to technical correspondence <sup>4</sup> , the permittee's existing SO <sub>2</sub> CEMS is located in the common stack and the permittee intends to use that system for demonstrating compliance with Subpart UUUUU; thus, \$63.10010(a)(3)(i)(B) is applicable. As such, the common stack requirements of §§63.10010(a)(3)(ii)(A) and (B) are included in the permit condition as applicable requirements.  Language pertaining to other compliance options (PM CPMS and sorbent trap monitoring) is retained in case these options are used in the future.
§63.10010(a)(4)	None	According to technical correspondence <sup>5</sup> there is no bypass stack for the sources. Therefore, this requirement is not applicable.

<sup>&</sup>lt;sup>4</sup> Email received from the permittee on 9/25/2013. <sup>5</sup> Ibid.

Subpart UUUUU Section	Title V	Discussion
§63.10010(a)(5)	None	This section does not apply since the units do not have a common control device or multiple stack or duct configuration.
§63.10010(a)(6)	None	This section does not apply since the units do not have multiple parallel control devices with multiple stacks.
§63.10010(b)	4.2.17.	According to technical correspondence <sup>6</sup> , the permittee utilizes a CO <sub>2</sub> CEMS as a diluent analyzer. Therefore, this requirement is included in the renewal permit.
\$63.10010(c)	None	While the permittee has a stack gas flow rate monitor for Part 75, the permittee stated in technical correspondence <sup>7</sup> that it does not intend to use that system for either a sorbent trap system or conversion to an electrical output-based standard. Therefore, this section does not apply.
§63.10010(d)	None	In technical correspondence the permittee stated that because both the pollutant and diluent (CO <sub>2</sub> ) measurements are made on a wet basis, there is no need to apply a moisture correction in order to calculate the SO <sub>2</sub> emission rate in units of the emission standard (lb/mmBtu). Therefore, this section does not apply.
§63.10010(e)	None	This requirement is not applicable since the permittee does not utilize an HCl or HF CEMS.
§63.10010(f)	4.2.12.	This section is applicable to the SO <sub>2</sub> CEMS the permittee will utilize to demonstrate compliance with the elected SO <sub>2</sub> limitation.
§63.10010(g)	None	For this renewal the permittee intends to use performance testing to demonstrate LEE status for Hg. Therefore, at this time, a Hg CEMS is not utilized and thus this requirement is not applicable.
§63.10010(h)	None	For this renewal the permittee intends to use performance testing to demonstrate LEE status for PM. Therefore, at this time, a PM CPMS is not utilized and thus this requirement is not applicable.
§63.10010(i)	None	For this renewal the permittee intends to use performance testing to demonstrate LEE status for PM. Therefore, at this time, a PM CEMS is not utilized and thus this requirement is not applicable.
§63.10010(j)	None	For this renewal the permittee intends to comply with the applicable filterable PM limitation instead of HAP metals. Therefore, this requirement for a HAP metals CEMS is not applicable.
§63.10010(k)	None	This requirement is not applicable since, for this renewal, the permittee has not elected to comply with the HCl and HF limits. Also, this requirement does not apply since the units are not liquid oil-fired.
§63.10011(a)	4.3.13.	This applicable requirement to demonstrate initial compliance using performance testing is cited with condition.
§63.10011(b)	None	This requirement is not applicable because the permittee is not subject to the PM CPMS requirements in Table 4; does not use a PM CPMS; and the units are not liquid oil-fired type.
§63.10011(c)(1)	None	This requirement is not applicable because the permittee does not, at this renewal, use a CEMS to measure Hg.
§63.10011(c)(2)	4.3.24.	This requirement is applicable to the use of SO2 CEMS, and is therefore included in the permit. The non-applicable language "or PM emissions" and "or filterable PM" is excluded.
§63.10011(d)	4.3.13.	This applicable requirement is included in condition 4.3.13. since it pertains to candidate LEE units, which is the option the permittee intends to use to demonstrate compliance with Subpart UUUUU.

 $<sup>^6</sup>$  Email received from the permittee on 9/25/2013.  $^7$  Ibid.

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Subpart UUUUU Section	Title V	Discussion
§63.10011(e)	4.5.12.	This requirement is to submit the NOCS containing the results of the
		initial compliance demonstration, according to §63.10030(e).
§63.10011(f)	4.1.23.	This requirement applies to all units, and is therefore included in the renewal permit. Note that §§63.10011(f)(1) and (2) are combined for one permit condition. According to technical correspondence <sup>8</sup> , the permittee utilizes natural gas as a startup fuel and the permittee considers it to be the cleanest fuel available. Since this determination of the cleanest fuel available needs to be made (and actually has already been made) before the compliance date to demonstrate initial compliance with the applicable work practice standards, the italicized language following the citation of authority
		noting a condition is subject to the compliance date is not included for this permit condition.
\$63.10011(g)	4.1.20. 4.1.21.	This section requires the permittee to follow the startup and shutdown requirements in Table 3 to Subpart UUUUU. Therefore, this section is cited with conditions 4.1.20. and 4.1.21.
§63.10020(a)	None	See discussion above concerning §63.10000(d).
§63.10020(b)	4.2.13.	Applicable requirement §63.10010(f)(1) requires use of a CEMS that meets 40 C.F.R. Part 75 for an SO <sub>2</sub> CEMS under Subpart UUUUU. Since the CEMS must be utilized, and such monitoring is subject to §63.10020(b), this section is applicable.
§63.10020(c)	4.2.14.	This requirement applies to the SO <sub>2</sub> CEMS, and is therefore included in the permit.
§63.10020(d)	4.2.15.	This requirement applies to the SO <sub>2</sub> CEMS, and is therefore included in the permit.
§63.10021(a)		This section requires that continuous compliance with the applicable standards be accomplished through the monitoring in Table 6 and 7 of Subpart UUUUU, as well as §§63.10021(b) through (g) (which are considered separately below).
	None	Table 6 pertains to PM CPMS, which will not be utilized by the permittee at renewal; therefore, such requirements are not applicable.
	4.1.17.	Table 7, Item #1, pertains to SO <sub>2</sub> CEMS which the permittee is utilizing. Therefore, this section (i.e., §63.10021(a)) is cited with permit condition 4.1.17. but Table 7 is IBR in the permit condition.
	None	Table 7, Item #2, pertains to PM CPMS to measure compliance, which the permittee is not utilizing. Therefore, this requirement is not applicable.
	None	Table 7, Item #3, is not applicable since the boilers are not oil-fired.
	4.3.13.(ii) 4.3.13.(iii) 4.3.13.(iv)	Table 7, Item #4, pertains to quarterly performance testing for coal-fired EGUs to measure compliance with one or more non-PM (or its alternative emission limits) applicable emissions limit in Tables 1 or 2, or applicable PM emissions limit (or its alternative emission limits) in Table 2. In this case, the non-PM limit in Table 2 is Hg. However, the quarterly testing is not part of the initially elected LEE status compliance option. Therefore, this compliance option requirement in Table 7 will be IBR in permit condition 4.3.13.(ii) by a parenthetical statement "according to Item #4 in Table 7 to 40

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<sup>&</sup>lt;sup>8</sup> Email received from the permittee on 9/25/2013.

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Subpart UUUUU Section	Title V	Discussion
		C.F.R. 63 Subpart UUUUU". In the case of PM, quarterly testing is not part of the initially elected LEE status compliance option. Therefore, this compliance option requirement in Table 7 will be IBR in permit condition 4.3.13.(iii) and (iv) by a parenthetical statement "according to Item #4 in Table 7 to 40 C.F.R. 63 Subpart UUUUU".
	4.1.19.	Table 7, Item #5, is applicable to the periodic performance tune-up already discussed in 40 C.F.R. §63.9991(a)(1), Table 3, Item #1. Thus, 40 C.F.R. §63.10021(a), Table 7, Item #5 is cited in condition 4.1.19.
	4.1.20., 4.1.21.	Table 7, Items #6 and #7 pertain to startup and shutdown work practice standards. Therefore, 40 C.F.R. §63.10021(a), Table 7, Items #6 and #7 will be cited in conditions 4.1.20. and 4.1.21., respectively.
§63.10021(b)	4.2.16.	This requirement is applicable to the elected SO <sub>2</sub> limitation and its corresponding requirement for an SO <sub>2</sub> CEMS to demonstrate compliance. In adherence to the U.S. EPA guidance, the equation is IBR. Non-applicable language (CEMS for HCl and HF) is excluded. However, in order to IBR other available compliance options (CEMS for PM or Hg, or sorbent trap monitoring system for Hg), such language is retained in case another option is utilized if LEE status is not obtained.
§63.10021(c)	None	This requirement is not applicable for this renewal since the permittee has elected to utilize testing for LEE status instead of using PM CPMS.
§63.10021(d)	None	This requirement is not applicable for this renewal since the permittee has elected to utilize testing for LEE status.
\$63.10021(e)	4.1.19.	This requirement to conduct periodic tune-ups is included in permit condition 4.1.19. which was incorporated in the permit as discussed above regarding §63.9991(a)(1), Table 3, Item #1.
		§63.10021(e)(9)(i) refers to reporting the date of the tune-up in hard copy as specified in §63.10030. The only requirement within §63.10030 that can apply to submitting a hard copy is the NOCS requirement in §63.10030(e). Therefore, a parenthetical reference to condition 4.5.12. follows the regulation language §63.10030.
§63.10021(f)	4.5.14.	Submit reports required under $\S63.10031$ , and if applicable, under appendices A and B of Subpart UUUUU. Since the permittee has elected to comply with LEE status for Hg, the monitoring provisions for Hg in Appendix A are not applicable. The permittee has elected to comply with the SO <sub>2</sub> limitation instead of the limit for HCl, and the permittee is not subject to an HF limitation in the regulation; therefore, the monitoring provisions for HCl and HF in Appendix B are not applicable.
		For the renewal a PM CPMS will not be utilized; therefore, such requirements in this section are not applicable. Similarly, for the renewal, the permittee has not elected to comply with the HAP metals limitation; therefore, requirements in this section for this type of CEMS are not applicable. Non-applicable regulation language is excluded from the permit condition.

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Subpart UUUUU Section	Title V	Discussion
§63.10021(g)	4.5.15.	This is an applicable requirement to report deviations. The
		regulation mentions Tables 1 through 4 of Subpart UUUUU.
		However, Table 1 does not apply since the units are existing. Table
		4 does not apply since, at this renewal, a PM CPMS will not be
§63.10021(h)	4.4.11.,	utilized. Therefore, the language is changed to "Tables 2 and 3".  This section requires keeping of records as specified in §63.10032
803.10021(II)	4.4.11.,	for startup and shutdown. The records in §63.10032 pertaining to
	4.4.16.	startup and shutdown are §§63.10032(c), (f), and (i). These are
		discussed below and are set forth as renewal permit conditions
		4.4.11., 4.4.13., and 4.4.16. Thus, §63.10021(h) is cited with each of
		these recordkeeping requirements.
§63.10021(i)	4.5.16.	This section requires reports as specified in §63.10031 concerning
		activities and periods of startup and shutdown. There is no reporting
		explicitly written or referenced in §63.10031 pertaining to startup and shutdown. The only reference could be the requirement of
		\$63.10031(c)(1), which IBR \$63.10(e)(3)(vi). In this Subpart A
		section, under §63.10(e)(3)(vi)(I) is the mention of a breakdown of
		the total duration of excess emissions during the reporting period
		into those that, among other causes, are due to startup/shutdown.
		Thus, §63.10021(i) is cited with permit condition 4.5.16. as
		authority specifically for the requirement in renewal permit
§63.10022	None	condition 4.5.16.a.(1).  See discussion above concerning §63.10006(g).
§63.10022	None	This requirement is not applicable for this renewal since the
§03.10023	Trone	permittee has elected to utilize performance testing to obtain LEE
		status instead of using PM CPMS.
Notifications		
§63.10030(a)		This section requires submittal of all notifications in §§ 63.7(b) and
		(c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to
		you by the dates specified.
	4.5.20.	§63.7 sets forth <i>Performance testing requirements</i> . Specifically,
		§63.7(b) requires a <i>Notification of performance test</i> at least 60 days
		before the test is initially scheduled to begin. Also, §63.9(e) sets
		forth the same Notification of performance test at least 60 days
		before the test. It is noted that Table 9 to Subpart UUUUU
		(Applicability of General Provisions) specifies that the 60-day
		notification in §63.9(d) is replaced by a 30-day notification period per §63.10030(d). Since §63.9(d) is the same as §63.7(b), this
		writer concludes that \$63.7(b) does not apply. Also, \$63.7(b) will
		not be cited in the condition 4.3.25. (see discussion below of
		§63.10030(d)). Finally, since this requirement pertains to testing, it
		is written in the testing subsection of the permit.
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	4.5.20.	§63.7(c) requires a <i>Quality assurance program</i> for performance testing. The site-specific test plan is required in condition 4.3.17.
		However, all other applicable notifications in §63.7(c) are IBR in
		condition 4.5.20.

Subpart UUUUU Section	Title V	Discussion
	4.5.20.	§63.8(e) requires a performance evaluation of CMS. The specific notification is the <i>Notification of performance evaluation</i> in §63.8(e)(2) and <i>Submission of site-specific performance evaluation test plan</i> in §63.8(e)(3), and <i>Reporting performance evaluation results</i> in §63.8(e)(5). Instead of writing these specific Subpart A requirements in the permit, they are effectively made requirements via IBR in condition 4.5.20.
	None	§§63.8(f)(4) and (6) are not applicable since neither an alternative monitoring method, nor an alternative to the relative accuracy test is utilized.
	4.5.12.	Among §§63.9(b) though (h), only the NOCS requirement of §63.9(h) is applicable. Therefore, this section is cited in condition 4.5.12.
§63.10030(b)	None	This Initial Notification requirement is applicable since the EGU started up before April 16, 2012. DAQ received the initial notification from the permittee on August 13, 2012, thereby meeting the deadline set in the regulation. Since this one-time requirement is fulfilled, it will not be included in the renewal permit.
§63.10030(c)	None	This section is not applicable since the units are not new or reconstructed.
§63.10030(d)	4.3.25.	This 30-day notification requirement replaces the 60-day notification requirement in §63.7(b) discussed above concerning §63.10030(a).
§63.10030(e)	4.5.12.	This section requires submittal of an NOCS since the permittee must conduct an initial compliance demonstration as specified in §63.10011(a) (condition 4.3.13.). Therefore, the requirements of this section are included in condition 4.5.12.
Reports		
§63.10031(a)	4.5.16.	Submit reports in Table 8 that are applicable. The only report in Table 8 is the compliance report. Therefore, the applicable requirements of Table 8 are incorporated as a permit condition.  Appendix A and B do not apply since at this renewal the permittee
		is not electing to continuously monitor Hg, HCl, or HF.
\$63.10031(b)	4.5.17.	The requirements of this section are set forth in the compliance report condition as sub-conditions (1) through (5). Note that (5) provides that the Title V source that has semiannual monitoring report due dates established may submit the compliance reports on the same date as the semiannual monitoring report. Thus, (5) is a consolidation of the terms in §63.10031(b)(5) with a reference to semiannual monitoring report condition 3.5.6.
§63.10031(c)	4.5.16.a.(1) through (4)	The specific information of this section are included in 4.5.16.a. since this condition references §§63.10031(c)(1) through (4).
§63.10031(d)	4.5.16.d.	This requirement regarding excess emissions while using a CMS is included in condition 4.5.16. since it is information that must be included in the compliance report.
§63.10031(e)	4.5.18.	The permittee has obtained a Title V permit; therefore, the regulation language is adapted to require the permittee to report all Subpart UUUUU deviations.
§63.10031(f)	4.5.19.	This requirement is to electronically report performance test results using EPA's WebFIRE database using Compliance and Emissions Data Reporting Interface (CEDRI). In this writer's opinion, the majority of the details in this section are similar to test methods and

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Subpart UUUUU Section	Title V	Discussion
		equations and may be IBR. Therefore, the details of the requirements are IBR by briefly stating the substantive portion of the requirement and then writing "according to" the appropriate section where the details (such as websites, mailing addresses, etc.) may be referenced.
		In particular, §63.10031(f)(1) pertains to CEMS performance test reporting; therefore, this requirement is included in the permit as 4.5.19.(1). However, §63.10031(f)(2) is not applicable for this renewal since the permittee has not elected to utilize PM CEMS or PM CPMS. This explains why there is no condition (2) in 4.5.19. §63.10031(f)(3) is applicable to reports for SO <sub>2</sub> CEMS, which the permittee has elected to utilize; therefore, this requirement is included in the permit as 4.5.19.(3). §63.10031(f)(4) is applicable and the details of it have been IBR. §63.10031(f)(5) is applicable and is written in the permit.
§63.10031(g)	4.5.16.e.	This section requires that malfunctions be described in the compliance report. Since condition 4.5.16. sets forth the contents of the compliance report, this applicable requirement is included in that permit condition.
Records		
§63.10032(a)	4.4.9.	This section is applicable (except for the part about continuously monitoring Hg and/or HCl and/or HF emissions per appendices A and/or B to Subpart UUUUU).
§63.10032(b)	4.4.10.	Since an SO <sub>2</sub> CEMS will be utilized, this section is applicable. The language regarding CPMS will not be included in the condition since this is not elected for this renewal.
\$63.10032(c)	4.4.11.	This section requires keeping of records in Table 7 to Subpart UUUUU to demonstrate continuous compliance. The applicable items in Table 7 have been analyzed in the above discussion of §63.10021(a), which are set forth in conditions 4.1.17., 4.3.13.(ii), 4.3.13.(iii), 4.3.13.(iv), 4.1.19., 4.1.20., and 4.1.21. Non-applicable language regarding PM CPMS is excluded.
§63.10032(d)	4.4.12.	Since the units are subject to an emission limit, the recordkeeping requirements of this section are potentially applicable. In particular, only the records in §§63.10032(d)(1) and (3) are applicable. §63.10032(d)(2) is not applicable since the permittee combusts a mixture of virgin coal and coal refuse. According to technical correspondence, the coal refuse has been determined by U.S. EPA to be a non-waste fuel per 40 C.F.R. §241.3(a)(3) and, therefore, it is not necessary to qualify for a waste exemption under the sections specified in §63.10032(d)(2).
§63.10032(e)	None	See discussion above concerning §63.10006(g).
§63.10032(f)	4.4.13.	This applicable requirement to keep records of startups and shutdowns is included in the permit.
§63.10032(g)	4.4.14.	This applicable requirement to keep records of malfunctions of an operation, and air pollution control and monitoring equipment is included in the permit.
\$63.10032(h)	4.4.15.	This applicable requirement to keep records of actions taken during periods of malfunction to minimize emissions is included in the permit.

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<sup>&</sup>lt;sup>9</sup> Email received from the permittee on 9/25/2013

Subpart UUUUU Section	Title V	Discussion
§63.10032(i)	4.4.16.	This applicable requirement to keep records of fuel types and amounts during each startup or shutdown is included in the permit.
§63.10032(j)	None	This requirement is not applicable since the units do not fire liquid oil, and do not qualify as limited-use liquid oil-fired EGUs.
Form and Reten	tions of Reco	rds
§§63.10033(a), (b), and (c)	4.4.8.	These requirements are identical to those in 40 C.F.R. 63 Subpart DDDDD (applicable to Auxiliary Boilers), with only the following exception shown below in bold font:
		§63.10033(c) reads "You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records off site for the remaining 3 years."
		While §63.7560(c) reads "You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records off site for the remaining 3 years."
		The Subpart UUUUU requirement could be interpreted as more stringent; however, the difference between the two requirements is negligible. The substantive requirement is that the records be available, on site, for the first 2 years after they are generated. If the record is in paper form, it must be on site (and therefore meet the requirement of Subpart UUUUU). If the record is electronic, it still is on site by being accessible at the site (thus meeting Subpart UUUUU). Therefore, the requirements of both MACTs are combined into one condition, and redundancy is avoided in this case.

Other requirements in Subpart UUUUU are not applicable to the units for one or more of the following reasons:

- The units are not new or reconstructed, as these terms are specified in §§63.9982(b) and (c).
- The units do not fire oil.

The permittee intends to demonstrate compliance with Subpart UUUUU using low emitting EGU status for PM and Hg; consequently, the acronym "LEE" is used in multiple places in the permit. Therefore, the acronym has been added to permit section 2.2.

III. Equipment Changes at the Facility. No significant physical changes or modifications have occurred at the Morgantown Energy Facility during the last five years. However, one minor change was accomplished pertaining to Emission Unit ID S004F, which until recently represented the transfer of Baghouse 3 dust to the Elevating Conveyor 2—Bottom Half (S004G). During April 2013, the dust discharged from Baghouse 3 was re-routed from Elevating Conveyor 2 to the Mill Collecting Conveyor 1 (S004D). The purpose of this change was to consolidate the fuel prior to entrance into the new coal sampler, which was installed on the Mill Collecting Conveyor to address the fuel sampling issue discussed in Section V of this Fact Sheet. The Baghouse 3 effluent continues to be controlled by Enclosed System 3 with no associated impact to particulate emissions from this source. This change is reflected in the following locations within this application: the Fuel Handling Facility Sketch in Attachment C, the Equipment Table in Attachment D, the Emission Unit Form for the Vent 4 sources

- in Attachment E, and the proposed permit changes in Appendix 2. Therefore, in Section 1.1., the part of the description of emission unit S004F "Elevating Conveyor 2" is replaced with "Mill Collecting Conveyor 1".
- IV. **Suggested Changes in the Renewal Application.** In the renewal application MEA listed several requested changes for the renewal operating permit. Two of the suggested revisions pertain to changes in regulations during the current permit term. The remaining changes provide more specific details needed to demonstrate compliance with established emission limitations and standards.
  - a.  $45CSR26\ NO_x\ Budget\ Trading\ Program$ . This rule has been repealed; therefore, current permit condition 3.1.9. containing such requirements, and the  $NO_x$  budget application, are not included in the renewal permit.
  - b. 45CSR37 CAMR Mercury Budget Trading Program. This rule has been repealed; therefore, current permit condition 3.1.10. containing such requirements and the associated Consent Order CO-R37-C-2008-4 are not included in the renewal permit.
  - c. Condition 4.1.5. Fuel Sulfur and Ash Limits. New language "based on a 30-day rolling average of the daily as-fired fuel samples (analyzed on an as-received basis)" has been added at the end of the condition. The authority of 45CSR§30-5.1.c. is utilized to specify the basis of compliance demonstration. Additionally, the word "coal" is changed to "fuel" since the CFB boilers are also permitted to burn coal refuse.
  - d. Condition 4.1.6. SO<sub>2</sub> Removal Efficiency. New language "on a 30-day rolling average basis in accordance with 40 C.F.R. §60.49Da(b)" has been added at the end of the condition. Since the permittee uses an SO<sub>2</sub> CEMS to demonstrate compliance with the applicable SO<sub>2</sub> limitations, the CEMS requirements of §60.49Da(b) are applicable, which is incorporated into the citation of authority. It is §60.43Da(g) that prescribes the 30-day rolling average requirements for SO<sub>2</sub> emission limitation and percent reduction requirements; thus, §60.43Da(g) is also incorporated into the revised citation of authority.
  - e. Condition 4.1.7 CFB Boiler Emission Limits Averaging Periods. The averaging period for both mass rate and heat rate limits of sulfur dioxide and nitrogen oxides is now specified in the renewal permit. The authority of 45CSR§30-5.1.c. is utilized to specify the 24-hour averaging periods for the pound per hour limits. The authority of 40 C.F.R. §§60.43Da(g) and 60.44Da(a)(1) are used to specify the 30-day rolling average period for the heat rate limits for SO<sub>2</sub> and NO<sub>x</sub>, respectively. A streamlining note (4) is added for the NO<sub>x</sub> heat rate limit.
  - f. Condition 4.1.9 CFB and Aux Boiler Combined Emission Limits Averaging Periods. The averaging period for the heat rate limits of sulfur dioxide and nitrogen oxides is now specified in the renewal permit. The authority of 40 C.F.R. §§ 60.43Da(g), 60.44Da(a)(1), and 60.44b(i) are used to specify the 30-day rolling average period for the heat rate limits for SO<sub>2</sub> and NO<sub>x</sub>.
  - g. Condition 4.2.1. CEMS Requirements. This condition currently requires that the SO<sub>2</sub>, NO<sub>X</sub>, and CO<sub>2</sub> continuous emission monitoring systems (CEMS) at Morgantown Energy Facility be compliant with the relevant requirements in 40 C.F.R. Part 60. However, the CEMS are also subject to the requirements of 40 CFR Part 75 including the quality assurance and quality control requirements of §75.21 and Appendix B. The Part 75 requirements are sometimes in conflict with those in Part 60, which can sometimes create confusion when trying to satisfy both sets of applicable regulations.
    - The U.S. Environmental Protection Agency has recognized this issue and responded by allowing sources to follow only Part 75 CEMS requirements for those monitoring systems subject to both rules. For sources subject to 40 C.F.R. Part 60 Subpart Da monitoring requirements, this option is

identified in  $\S\S60.49(b)(4)$ , (c)(2), and (d) for  $SO_2$ ,  $NO_X$ , and diluent CEMS respectively. The two significant restrictions on the use of data from Part 75 CEMS to meet the requirements of Subpart Da are that: 1) substitute data values derived from the missing data procedures in Subpart D of Part 75 cannot be used, and 2) the data cannot be adjusted for bias according to the procedures of Part 75. MEA has requested that the wording of condition 4.2.1 be modified to clarify that Morgantown Energy Facility has the flexibility to follow only Part 75 requirements for the  $SO_2$ ,  $NO_X$  and  $CO_2$  CEMS.

A CEMS operated according to 40 C.F.R. Part 75 is added as an alternative monitoring methodology. The authority of 45CSR§30-5.1.c. is utilized to specify the CEMS alternative in the last statement of the permit condition.

h. Condition 4.3.2. - SO<sub>2</sub> Compliance Determination. Language in this condition is revised as follows:

Compliance with the sulfur dioxide emission limitation and sulfur dioxide reduction requirements under conditions 4.1.7., and 4.1.6., and 4.1.9. and as required by 40 C.F.R. §60.43Da(a), shall be demonstrated in accordance with 40 C.F.R. §60.8, 40 C.F.R. §60.48Da, 40 C.F.R. §60.49Da and 40 C.F.R. §60.50Da, except that compliance with the maximum SO<sub>2</sub> emission limitation (in units of ppmvd and lbm/hr) shall be demonstrated for each and all fixed twenty-four hour periods. Compliance with the SO<sub>2</sub> emission limitations in units of lb/mmBtu and SO<sub>2</sub> percent reduction shall be demonstrated based on the rolling average of 30 successive boiler operating days.

[45CSR13/14 - Permit No. R13-1085B/R14-7B Other Requirement (B)(1)(c); 40 C.F.R. §60.43Da(g); 45CSR16; 45CSR§30-5.1.c.]

The authority of the NSPS is used to include the 30-day rolling average, and 45CSR30 is used to specify the concentration and mass rate units of the SO<sub>2</sub> limitations.

i. Condition 4.4.1.b. – Fuel Recordkeeping. The permittee has requested that this permit condition be modified in order to clarify that fuel sampling is performed based on daily as-fired samples rather than sampling each shipment. This change is necessary in order to align the permit language with the applicable regulatory requirement in 40 C.F.R. §60.49Da(b)(3) to maintain an "as fired" fuel monitoring system meeting the requirements of Method 19 of Part 60 Appendix A. For the purpose of as-fired fuel sampling under Method 19, sources must collect fuel samples that are representative of the fuel bunkered or consumed during each steam generating unit operating day. This can only be accomplished through daily sampling of the as-fired fuel, not through sampling of each shipment that is delivered to the facility. Hence, the language of the condition is revised as follows:

*Coal* – Ash and BTU analysis for each shipment from daily as-fired fuel samples required per condition 4.1.5. and the quantity of fuel consumed on a daily basis.

The language "for each shipment" is from 45CSR§2A-7.1.a.4. However, the permittee has noted the applicable NSPS requirement for daily samples of as-fired fuel, which is more stringent than 45CSR2A since the NSPS sampling is more frequent. Therefore a streamlining note is also added. The NSPS section and State rule are added to the citation of authority.

V. Closure of Consent Order No. CO-R13,14,16,30-E-2013-6. This consent order was entered on May 8, 2013, and was issued for violations of permit R13-1085A/R14-7B, Title V permit R30-06100027-2008 (MM01), and 40 C.F.R. 60 Subpart Da. Specifically, excursions existed wherein fuel sulfur content was not representatively entered into the Certified Emissions Monitoring system when calculating the sulfur dioxide reduction efficiencies specified in operating permit condition 4.1.6.

According to the Closure Document (dated 7/01/2013) written by Mr. Brian Tephabock of the DAQ Fairmont Regional Office, the permittee signed the consent order and made the associated penalty payment. The required automated fuel sampling system was installed and made fully functional on April 23, 2013 at which time the procedures of Method 19 of Appendix A of 40 C.F.R. Part 60 were being fully followed to calculate the SO<sub>2</sub> reduction efficiencies. Mr. Tephabock conducted an onsite inspection on June 13, 2013 and confirmed the automated fuel sampling system installation. According to the Closure Document, the permittee has resolved the non-compliance issues as contained in the Consent Order. In accordance with item 8 under the Other Provisions section of the Consent Order, the permittee submitted a letter dated June 24, 2013 indicating written notification of full compliance and requested final closure of the Consent Order. The Closure Document serves as final closure and documentation of completion of the Consent Order.

Based upon these facts, no requirement or provision of Consent Order No. CO-R13,14,16,30-E-2013-6 is included in the renewal operating permit.

- VI. **45CSR2 Testing**. According to technical correspondence dated 9/25/2013 received from the permittee, the most recent particulate matter testing of the CFB boilers pursuant to condition 4.3.12. was performed on April 3, 2012. The test results were 5.83 lbm/hr and 0.008 lbm/mmBtu. The hourly rate emissions were 26% of the 22.5 lbm/hr limitation, and the heat rate emissions were 27% of the 0.03 lbm/mmBtu limitation. The CFB boilers are currently on a three-year (*i.e.*, 36-month) schedule. Based upon these facts, and by applying the definition of "Cycle '3" in 45CSR2A<sup>10</sup>, the next testing under this condition must be conducted by April 3, 2015. This deadline has been written in the renewal permit.
- VII. 40 C.F.R. 60 Subpart Y Standards of Performance for Coal Preparation and Processing Plants. Several changes with regard to this regulation are made in the renewal permit. The changes are essentially based upon section numbering within the subpart.
  - a. The Subpart Y citation of authority in condition 5.1.2. is revised in order to reflect the current regulation. In particular, §60.252(c) is changed to §60.254(a). Noted that §60.254(a) is applicable since the affected sources meet the criteria in §60.250(b).
  - b. Condition 5.3.1.a. of the current permit was based upon §§60.11(b), (e)(1), and 60.254(b)(2). It would seem that the monitoring of the current version of NSPS Subpart Y would be §60.257(a). However, based upon the construction dates of the sources venting to Vents 1 through 5, the sources meet the applicability criteria of §60.250(b), which does not include §60.257 as being applicable. By way of contrast, other newer sources are subject to §60.257 as specified in §§60.250(c) and (d). Therefore, Vents 1 through 5 are not subject to the monitoring in §60.257(a). Nevertheless, a practical method of demonstrating compliance with the applicable 20% opacity limitation (condition 5.1.2.) must be included in the permit. The current Method 9 monitoring methodology will be retained and the sole authority will be 45CSR§30-5.1.c.

<sup>10</sup> According to the definition in 45CSR§2A-2.6.c., Cycle '3' means that testing shall be performed within thirty-six (36) months from the date of the previous test, but no earlier than eighteen (18) months from the date of the previous test.

#### VIII. Miscellaneous Changes

- a. Condition 3.1.3. The citation of 45CSR15 is replaced with 45CSR34 since the former has been repealed and the latter currently adopts NESHAPs requirements.
- b. Condition 3.3.1.d. This new boilerplate condition has been added for the renewal permit.
- c. Conditions 3.5.3. and 3.5.5. have been modified for the electronic submittals to USEPA.

# **Non-Applicability Determinations**

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

- 1. **40** C.F.R. **60** Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Each of the boilers (CFB and auxiliary) has a maximum design heat input capacity greater than 100 MMBtu/hr. Therefore, in accordance with 40 C.F.R. §60.40c(a), the boilers are not subject to Subpart Dc.
- 2. 40 C.F.R. 60 Subpart K 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. None of the tanks at the facility are greater than 40,000 gallons capacity. Therefore, in accordance with applicability criteria §60.110(a), Subpart K does not apply to the facility's tanks.
- 3. 40 C.F.R. 60 Subpart Ka Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. None of the tanks at the facility are greater than 40,000 gallons capacity. Therefore, in accordance with applicability criteria §60.110a(a), Subpart Ka does not apply to the facility's tanks.
- 4. 40 C.F.R. 60 Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. None of the tanks at the facility are greater than 75-m<sup>3</sup> (19,812.9 gallons) capacity. Therefore, in accordance with applicability criteria §60.110b(a), Subpart Kb does not apply to the facility's tanks.
- 5. 40 C.F.R. 60 Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. In accordance with §60.670(a)(1), this NSPS applies to the following affected facilities 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. The permittee's facility operates some of this equipment. Under §60.671, the NSPS defines a nonmetallic mineral to include limestone, but neither coal nor gob (i.e., waste or refuse coal) are included. Therefore, this Subpart does not apply to the equipment used to process coal or gob at the facility. Also under §60.671, the NSPS defines a Nonmetallic mineral processing plant to mean "any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670(b) and (c)." The key to evaluating the facility with respect to this definition is the language "crush or grind". Even though limestone is a nonmetallic mineral as defined in the NSPS, it is not crushed or ground at the facility. Limestone is received already crushed and ground to the appropriate size, and is not subsequently crushed or ground at the facility. This operating scenario agrees with the process flow diagrams in the 2008 renewal application, and was confirmed by the permittee in technical correspondence (6/03/08 e-mail). Therefore, this Subpart does not apply to the processing of limestone at the facility.

- 6. **40** C.F.R. **60** Subpart CCCC Standards of Performance for Commercial and Industrial Solid Waste Incineration Units. The CFB Boilers are not commercial and industrial solid waste incineration (CISWI) units as defined in §60.2265. This is due to the fact that they are fired by a blend of virgin bituminous coal and coal refuse as well as natural gas for startup purposes. All of these fuels meet the definition of "traditional fuels" in 40 CFR §241.2 and hence are not considered solid wastes.
- 7. **40** C.F.R. **63** Subpart Q National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers. After review of the permittee's Process Flow Schematic and Equipment Table in the 2008 renewal application, it was determined that the facility does not have an industrial process cooling tower, which is defined in §63.401. Therefore, the facility does not meet the applicability criteria of §63.400(a), and hence this MACT does not apply to the facility.
- 8. **40 C.F.R. 63 Subpart T -** *National Emission Standards for Halogenated Solvent Cleaning.* The batch cold solvent cleaning machine at the facility does not utilize any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.
- 9. **40** C.F.R. **63** Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. The facility is not an area source of HAP emissions; therefore, it does not meet the applicability criteria of this regulation.
- 10. **40 C.F.R. 98 Subpart D** *Electricity Generation*. Facility is not subject to the Acid Rain Program and is not required to monitor and report CO<sub>2</sub> mass emissions year-round according to 40 C.F.R. Part 75.
- 11. **45CSR5** *To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas.* A "Coal Preparation Plant" is defined under 45CSR§5-2.4., and this definition includes any facility that prepares coal by crushing, and further such definition includes all coal handling operations associated with a crushing process. The permittee crushes coal at the facility using a grinding mill (Em. Unit ID S003J) and hammer mill (Em. Unit ID S003K), and there is coal handling equipment associated with the crushing. However, since the facility is subject to 45CSR2, according to 45CSR§5-2.4.b. the *facility* is not included in the definition of a "Coal Preparation Plant". Therefore, 45CSR5 does not apply to the facility, and particularly its coal crushing operations and associated coal handling.
- 12. **45CSR7** *To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.* Since the facility is subject to 45CSR2, 45CSR§7-10.1. provides an exemption from 45CSR7.
- 13. **45CSR17** *To Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.* The facility is characterized by the handling and storage of materials that have the potential to produce fugitive particulate if not properly controlled. However, since the facility is subject to 45CSR2, it is not subject to this rule in accordance with the exemption granted in 45CSR§17-6.1.
- 14. **45CSR33** *Acid Rain Provisions and Permits* and **40 C.F.R. Part 72** *Permits Regulation.* The facility is exempt from "Acid Rain" requirements in accordance with the exemption granted under 40 C.F.R. §72.6(b)(5). It follows, then, that the facility is also exempt from the corresponding state rule 45CSR33.

# **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: December 9, 2013 Ending Date: January 8, 2014

# **Point of Contact**

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

Denton B. McDerment West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> 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)**

No comments were received from the public, which includes the permittee.

No comments were received from U.S. EPA.