West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

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

Permit Number: R30-05100006-2009
Application Received: July 14, 2008
Plant Identification Number: 05100006
Permittee: Ohio Power Company
Facility Name: Kammer Plant/Cresap
Mailing Address: P.O. Box K, Moundsville, WV 26041

Physical Location:	Moundsville, Marshall County, West Virginia
UTM Coordinates:	515.52 km Easting • 4,410.48 km Northing • Zone 17
Directions:	From Charleston, take I-77 North to exit 179. Travel north on State Route 2 approximately 70 miles to Cresap. Facility is located on Route 2 approximately 9 miles south of Moundsville, WV.

Facility Description

The Kammer Plant is a fossil fuel fired electric generation facility and operates under Standard Industrial Classification (SIC) code 4911. The facility consists of three (3) coal-fired steam generators with a rated design capacity of 2156 mmBtu/hr each, various supporting operations such as coal handling, limestone handling and ash handling, and 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.

This renewal also includes Coal blending project submitted as minor modification to the current permit on October 3, 2008.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]

Regulated Pollutants	Potential Emissions	2006 Actual Emissions
Carbon Monoxide (CO)	2,179	329.5
Nitrogen Oxides (NO_X)	31,234	10,896.2
Particulate Matter ($PM_{2.5}$)	537.35	N/A
Particulate Matter (PM_{10})	1,012.15	N/A
Total Particulate Matter (TSP)	1,515.3	68.7
Sulfur Dioxide (SO_2)	76,491	41,155.9
Volatile Organic Compounds (VOC)	249.3	73.0

PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2006 Actual Emissions
Hydrogen Chloride	5,783	1,530
Hydrogen Fluoride	502	81
Selenium	22.7	2
Other HAPs	16.25	0.84

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

Title V Program Applicability Basis

This facility has the potential to emit 76,491 tons per year of SO_2, 31,234 tons per year NO_X, 1,515.3 tons per year PM, 2,179 tons per year CO and 249.3 tons per year VOCs and 6,324 tons per year HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Kammer Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30. This facility is also subject to Title IV (Acid Rain) requirements and therefore is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR1	NO_X Budget Trading Program as a Means of Control and Reduction of Nitrogen Oxides
	45CSR2	Control of particulate matter emissions from indirect heat exchangers.
	45CSR6	Open burning prohibited.
	45CSR10	Control of sulfur dioxide emissions from indirect heat exchangers.

	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary sources
	45CSR16	Standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting
	45CSR26	NO_X Budget Trading Program as A Means of Control and Reduction of Nitrogen Oxides from Electric Generating Units
	45CSR30	Operating permit requirement.
	45CSR33	Acid Rain Provisions and Permits
	45CSR38	Determination of Compliance With Air Quality Management Rules
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 64	Compliance Assurance Monitoring
	40 C.F.R. Part 72	Permits Regulation
	40 C.F.R. Part 73	Sulfur Dioxide Allowance System Permits Regulation
	40 C.F.R. Part 74	Sulfur Dioxide Opt-ins
	40 C.F.R. Part 75	Continuous Emissions Monitoring
	40 C.F.R. Part 76	Nitrogen Oxides Reduction Program
	40 C.F.R. Part 77	Excess Emissions
	40 C.F.R. Part 78	Appeals Procedure for Acid Rain Program
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40 C.F.R. Part 60, Subpart Y	Coal Preparation Plants
State Only:	45CSR4	No objectionable odors.
	WVDAQ Letter	Letter dated September 3, 2002 addressed to Mr. Greg Wooten and signed by Jesse D. Adkins regarding the thermal decomposition of boiler cleaning solutions.
	WVDAQ Letter	Letter dated January 21, 2004 addressed to Mr. Frank Blake and signed by Jesse D. Adkins regarding the combustion of Demineralizer Resins.
	45CSR37	Mercury Budget Trading Program
	45CSR39	NO_x Annual Trading Program
	45CSR40	NO_x Ozone Season Trading Program
	45CSR41	SO_2 Trading Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.,* 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
	August 11, 2005	PD05-119; no permit needed for delivery of coal by truck
R13-1679A	May 12, 2006	

R13-1582C	February 12, 2009	
U.S.District Court Consent Decree regarding Civil Actions C2-99-1182, C2-05-360 and C2-04-1098	December 10, 2007	Consent Decree for NSR lawsuits
R33-3947-2012-3	December 18, 2007	Title IV Acid Rain Permit
NOx Budget Permit - Unit 1, 2 & 3	October 29, 2002	
CO-R37-C-2008-4	April 7, 2008	Compliance order in response to decision to vacate federal Clean Air Mercury Rule

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

Wherever the language "current permit" is used throughout this fact sheet, it is in reference to Title V operating permit R30-05100006-2004 last modified on August 28, 2007, unless otherwise noted.

U.S.District Court issued a consent decree on December 10, 2007 limiting SO2 emission beginning on Jan 1, 2010 – to address this, conditions 4.1.7 and 4.5.7 have been added to the permit.

Boilers and associated equipment

45CSR2 – ***To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers***

PM testing in accordance with Permit Section 4.3.1 - A test was completed on July 13, 2006 and resulted in mass emission rates ≤50% of the weight emission standard. Therefore, the current testing frequency is "Once/3 years." – The next test has to be performed by July 13, 2009.

45CSR2A and 45CSR10A Monitoring Plan

The Rules 2 and 10 monitoring plan was submitted in the application in electronic format. The electronic file was identified as revision 4. The plan was copied and pasted into the permit as Appendix B. The only changes made by this writer to the plan are (1) **Sample copies** of COMS Summary and downtime reporting are taken out; (2) Language for **additiona**l time for implementation of testing, monitoring , recordkeeping and reporting commitments have been taken out.

45CSR33 – ***Acid Rain Provisions and Permits***

The most recent Phase II Acid Rain permit R33-3947-2012-3 became effective on January 1, 2008. This permit, along with the application, Phase II NOx Compliance Plan, and Phase II NOx Averaging Plan are given in the permit as Appendix C.

45CSR37 – ***Mercury Budget Trading Program to Reduce Mercury Emissions***

Compliance Order # CO-R37-C-2008-4

In response to the federal Clean Air Mercury Rule (CAMR), West Virginia enacted 45CSR37, which became effective on May 1, 2006. On February 8, 2008, the federal CAMR rule was vacated, and on March 24, 2008, US EPA appealed the decision. The federal CAMR rule is still subject to pending litigation and 45CSR37, although not vacated by the court, is intrinsically tied to the provisions of the federal CAMR program; therefore, the Compliance Order CO-R37-C-2008-4 holds the permitting requirements (condition 3.1.14.) in abeyance pending resolution of ongoing CAMR litigation or until other final action is taken. Details concerning 45CSR37 and permit condition 3.1.14. are set forth in the Director's April 7, 2008 cover letter to Mr. John M. McManus with the compliance order. The compliance order is included with the permit as Appendix D.

An explanatory note has been placed at the end of the CAMR permit condition indicating that certain requirements are held in abeyance.

CAIR Rules 45CSR39, 45CSR40, and 45CSR41 (State-enforceable only)
On December 23, 2009, the U.S. Court of Appeals for the D.C. Circuit decided to remand to EPA without vacature the Clean Air Interstate Rule (CAIR). As such, these conditions (3.1.15. through 3.1.17.) have been added to the permit. The CAIR application is also included with the permit as Appendix E.

The CAIR rules 45CSR39 and 45CSR40 effectively provide a budget trading program for the control and reduction of the pollutant NOx emitted from affected sources. Historically, this pollutant has been regulated under rules 45CSR1 (NOx Budget Trading program for non-EGUs) and 45CSR26 (NOx Budget Trading program for EGUs). Since the CAIR rules are providing the NOx regulation, rules 45CSR1 and 45CSR26 are no longer necessary and will be repealed effective May 1, 2009.

40 C.F.R. Part 64 – *Compliance Assurance Monitoring (CAM)*
The permittee submitted a CAM plan in the renewal application for Units 1, 2 and 3 to assure compliance with the 45CSR§2-4.1.a. PM mass limitation, which is 323.4 lb/hr aggregated from the three units. Unit 1, 2 and 3 are all pollutant-specific emission units (PSEUs) for the purposes of CAM. The PM emissions of Unit 1, 2 and 3 are controlled by electrostatic precipitators (ESPs). The potential pre-control emissions of PM from each PSEU are greater than the major source threshold for PM. Thus, PSEUs meet all three applicability criteria given under 40 C.F.R. §§ 64.2(a)(1)-(3).

The CAM plan submitted in the application suggested an opacity indicator range of zero to more than 10% (the upper level to be determined by testing). During the development of this renewal, the permittee worked out a testing plan for their Kammer Plant (ID# 051-00006) in order to establish an opacity range that demonstrates compliance with the PM limit. According to §64.4(e), this testing must be complete "prior to use of the monitoring." However, there is a deadline to implement the CAM monitoring. Testing *and* implementation of the monitoring (which includes the test result opacity range), must be complete within 180 days of issuance of the permit (§64.4(e)). The Kammer facility will perform testing to verify that 0-10% opacity will demonstrate compliance with the particulate matter mass emission limit. The CAM-related testing and CAM plan implementation will be conducted according to a schedule set forth in permit condition 4.2.5. Table 1 below summarizes the CAM plan.

Table 1 – CAM Plan for Steam Generators *Unit 1, 2* and 3

Elements of the CAM Plan	Indicator No. 1 of 1
I. GENERAL CRITERIA	Opacity
Monitoring Approach	Opacity is continuously measured and recorded by a certified opacity monitoring system (4.2.2.).
Indicator Range	The indicator range is zero to 10% opacity, and will be verified by testing (4.2.5.). Monitoring shall be implemented within 180 days of issuance of this renewal permit (4.2.5.(c)). Continuously measured opacity values are reduced to six-minute block averages (4.2.4.(a)). These 6-minute averages are averaged into 3-hour block average opacity values (4.2.4.(c)). An excursion is defined as two consecutive 3-hour block averages greater than 10% (4.2.4.(c)). Excursions trigger an inspection, evaluation, and corrective action (4.2.7.). Excursions are also included in the recordkeeping (4.4.4.), and reporting requirements (4.5.6.).
QIP threshold	If five (5) percent or greater of the 3-hour average COMS opacity values indicate excursions during a calendar quarter, the permittee must develop a QIP (4.2.9.(2)).
II. PERFORMANCE CRITERIA	
Specifications for obtaining representative data	The location of the opacity monitors is in accordance with 40 C.F.R. 60, Appendix B, Performance Specification 1 (PS-1). The COMS was installed in accordance with PS-1. Therefore, the employed COMS must be used to comply with CAM (see §64.3(d)(1)), and §§64.3(a) and (b) are automatically satisfied when COMS is used (see §64.3(d)(2)(ii)). Refer to condition 4.2.2.

Elements of the CAM Plan	Indicator No. 1 of 1
Verification of Operational Status	The COMS is not *new or modified monitoring equipment*; therefore, verification of operational status pursuant to §64.3(b)(2) is not applicable.
QA/QC Practices and Criteria	The COMS was installed and evaluated in accordance with PS-1. Zero and span drift are checked daily, and filter audits are performed in accordance with PS-1. §64.3(b)(3) is automatically satisfied when COMS is used, according to §64.3(d)(2)(ii). Refer to condition 4.2.2.
Monitoring frequency	The monitoring frequency is continuous (4.2.1., 4.2.10). §64.3(b)(4) is automatically satisfied when COMS is used, according to §64.3(d)(2)(ii).
Data Collection Procedure	The data are collected by a computerized data acquisition and handling system (DAHS). This system collects and retains all relevant opacity data (4.2.2., 4.4.4). §64.3(b)(4) is automatically satisfied when COMS is used, according to §64.3(d)(2)(ii).
Averaging Period	The averaging period is on a six-minute block basis (4.2.4.a.). These 6-minute averages are averaged into 3-hour block average opacity values (4.2.4.c.). §64.3(b)(4) is automatically satisfied when COMS is used, according to §64.3(d)(2)(ii).

CAM is not applicable to the control of the following pollutants emitted by PSEUs Unit 1 and Unit 2:

Carbon monoxide
The Units 1, 2 and 3 are not subject to CAM for carbon monoxide (CO) because the units are not subject to an emission limitation or standard for CO (cf. 40 C.F.R. §64.2(a)(1)). Additionally, the units do not use a control device to control CO emissions (cf. 40 C.F.R. §64.2(a)(2)).

Oxides of Nitrogen
The Units 1, 2 and 3 are not subject to CAM for oxides of nitrogen (NOx) because such emissions from the units are subject to emission standards (i.e., 45CSR26) that apply solely under an emissions trading program that has been approved by the Administrator for NOx (cf. 40 C.F.R. §64.2(b)(1)(iv)).

Sulfur Dioxide
The Units 1,2 and 3 are not subject to CAM for sulfur dioxide (SO2) because the units are subject to emission standards prescribed by an Acid Rain Program pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act (cf. 40 C.F.R. §64.2(b)(1)(iii)).

Volatile Organic Compounds
The Units 1, 2 and 3 are not subject to CAM for volatile organic compounds (VOC) because the units are not subject to an emission limitation or standard for VOC (cf. 40 C.F.R. §64.2(a)(1)). Additionally, the units do not use any control device to control VOC emissions (cf. 40 C.F.R. §64.2(a)(2)).

Hazardous Air Pollutants (HAPs)
The Units 1, 2 and 3 are not subject to CAM for hazardous air pollutants (HAPs) because the units are not subject to an emission limitation or standard for HAPs (cf. 40 C.F.R. §64.2(a)(1)).

Material Handling

General
A variety of materials are handled at the facility. Section 5.0 of the current permit was dedicated to "Coal, Limestone and Ash Handling." Since the current permit was revised on August 28, 2007, construction permit R13-1582B was modified to R13-1582C to include "Coal Blending Project".

45CSR13, Permit R13-1582C
The specific requirements from this construction permit have been placed in section 5.0 of the renewed Title V permit. Some requirements from R13-1582C have been cited elsewhere in the renewal permit. For example, R13-1582C, condition 4.4.1 has been cited in Title V condition 3.3.1.

40 C.F.R. 60 Subpart Y – *Standards of Performance for Coal Preparation Plants*
Equipment to be added for "Coal Blending Project" will be subject to 40 C.F.R. 60 Subpart Y. Conditions applicable in 40 C.F.R. 60 Subpart Y have been added to this renewal. Currently, there is a revision to subpart Y that was previously proposed for public comment in April, 2008. Permit limits under the proposed rule would apply.
40 C.F.R. 60 Subpart Y is not applicable to this facility till "Coal Blending Project" is installed.

Non-Applicability Determinations

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

a. 45CSR1 – *NO_x Budget Trading Program As A Means Of Control And Reduction Of Nitrogen Oxides From Non-Electric Generating Units*: The Kammer Plant does not have any fossil fuel-fired "Non-Electric Generating Units" as defined in this rule.

b. 45CSR5 – *To Prevent And Control Air Pollution From The Operation Of Coal Preparation Plants, Coal Handling Operations And Coal Refuse Disposal Areas*: The Kammer Plant is subject to the requirements of 45CSR2 and is therefore exempt from the provisions of 45CSR5 as outlined in 45CSR§§5-2.4.b. & 14.

c. 45CSR17 – *To Prevent And Control Particulate Matter Air Pollution From Materials Handling, Preparation, Storage And Other Sources Of Fugitive Particulate Matter*: The Kammer Plant is subject to the fugitive particulate matter emission requirements of 45CSR2 and is therefore exempt from the provisions of 45CSR17 as outlined in 45CSR§17-6.1.

d. 40 C.F.R. 60 Subpart D –*Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced After August 17, 1971*: Kammer's steam generators commenced construction prior to 1971.

e. 40 C.F.R. 60 Subpart Da – *Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced After September 18, 1978*: Kammer's steam generators commenced construction prior to September 18, 1978.

f. 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 May 18, 1978*: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR 60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after June 11, 1973 and prior to May 19, 1978.

g. 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:* The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR 60.111a(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after May 18, 1978 and prior to July 23, 1984.

h. 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:* Storage vessels potentially affected by this rule are exempted because they contain liquids with a maximum true vapor pressure of less than 3.5 kPa, have a storage capacity of less than 75 cubic meters, or have not commenced construction, reconstruction or modification after July 23, 1984.

i. 40 C.F.R. 63 Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*: The facility does not include industrial process cooling towers that have operated with chromium-based water treatment chemicals on or after September 8, 1994.

j. 40 CFR 60 Subpart OOO - While this facility does contain limestone handling equipment, it is not a nonmetallic mineral processing plant, as defined in Subpart OOO. A subpart OOO nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral (i.e. limestone). The Kammer Plant equipment does not crush or grind the limestone.

k. 40 C.F.R 63 Subpart ZZZZ: In the original permit there was paragraph with MACT 112(j) Hammer Application for 40 C.F.R 63 Subpart ZZZZ due to a 213 hp diesel emergency fire pump. The 213 hp diesel emergency fire pump was installed before 1960. This fire pump is exempt from 40 C.F.R 63 Subpart ZZZZ because it is less than 500 hp and manufactured before 1-1-2008.

l. 40 C.F.R 60 Subpart IIII: 213 hp diesel emergency fire pump is exempted from 40 C.F.R 60 Subpart IIII because it is existing RICE (constructed before 6-12-2006).

m. The coal and limestone processed at this plant is used solely for the boilers at this facility. The boilers are subject to 45CSR2 – hence according to 45CSR§7-10.1 and 45CSR§5-2.4b, 45CSR7 and 45CSR5 are not applicable to this facility.

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:	March 26, 2009
Ending Date:	April 27, 2009

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

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Due to company's comment note appending the permit condition 3.1.14 was changed from "April 2008 Compliance Order holds specific requirements of 45CSR37 in abeyance pending resolution of federal litigation related to CAMR" to "The DAQ Director concluded in Compliance Order #CO-R37-C-2008-4 (Appendix D of this permit) that the only 45CSR37 requirement applicable after the Federal CAMR program was vacated was to obtain a Hg budget permit, which is contained in Section 21 of the rule (cf. FINDINGS OF FACT, Item #12, in Appendix D). Refer to Compliance Order # CO-R37-C-2008-4 (Appendix D), which holds the requirements of 45CSR37, Section 21, in abeyance pending resolution of the ongoing CAMR litigation or final action is taken by the State to revoke this order or to repeal, revise, or replace 45CSR37".