

# Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on April 21, 2009.

Permit Number: **R30-05100005-2009**  
Application Received: MM02 - **March 19, 2012**  
MM03 - **September 26, 2012**  
Plant Identification Number: **03-54-05100005**  
Permittee: **Ohio Power Company**  
Facility Name: **Mitchell Plant**  
Mailing Address: **1 Riverside Plaza, Columbus, Ohio 43215-2373**

Permit Action Number: *MM02 & MM03* Revised: *January 23, 2013*

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Physical Location: Cresap/Moundsville, Marshall County, West Virginia  
UTM Coordinates: 516.00 km Easting • 4409.00 km Northing • Zone 17  
Directions: From Charleston take Interstate 77 North to Exit 179. Travel north on US Route 2 approximately 70 miles to Cresap. Facility is located on Route 2 approximately nine (9) miles south of Moundsville, WV.

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### Facility Description

#### General

The Mitchell Plant is a fossil fuel fired electric generation facility and operates under Standard Industrial Classification (SIC) code 4911. The facility consists of two (2) coal-fired steam generators with a rated design capacity of 7020 mmBtu/hr each, one (1) oil-fired auxiliary boiler with a rated design capacity of 663 mmBtu/hr, various supporting operations such as coal and ash handling, limestone 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.

Project Description

This permit revision incorporates changes made under R13-2608C for the extensive repairs made to the auxiliary boiler Aux 1. The rebuild will include the following:

- All new water and steam tubing/headers,
- New steam/mud drum shells and internal components,
- Full replacement of pneumatic controls,
- New Low NO<sub>x</sub> burners,
- Flue Gas Recirculation,
- New induced draft fan,
- New insulation, refractory, casing, lagging, and seals,
- New ammonia chemical feed system.

All other components will be reused to the fullest extent possible including the external utilities piping, access platforms, stack, forced draft fans, ductwork, etc.

The permit revision also incorporates changes made under R13-2608D which was to increase the permitted CO limit of the auxiliary boiler.

**Emissions Summary**

According to Attachment S in the application, the changes in potential emissions for this action are:

Pollutant	Change in Potential Emissions (+ or -) TPY
SO <sub>2</sub>	-8984.79
NO <sub>x</sub>	-450.11
PM	-257.21
PM <sub>10</sub>	-128.60
CO	-13.11
CO <sub>2</sub>	-416,300.5
VOC	-3.73
Total HAPs	-1.283

**Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential to emit 5,725.57 tpy of CO; 36,335.24 tpy of NO<sub>x</sub>; 3,168.81 tpy of PM<sub>10</sub>; 89,742.63 tpy of SO<sub>2</sub>; 567.31 tpy of VOC; 12,337 tpy of HCl; 1,071 tpy of HF; 48.49 tpy of Se; and 13.38 tpy of Be. 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, Ohio Power Company's Mitchell Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

**Legal and Factual Basis for Permit Conditions**

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

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air Pollution from the Combustion of Fuel in Indirect Heat Exchangers
	45CSR10	To Prevent and Control Air Pollution from the Emission of Sulfur Oxides
	45CSR13	Construction permit requirements
	45CSR16	Standards of Performance for New Stationary Sources
	45CSR30	Operating permit requirements
	45CSR34	Emission Standards for Hazardous Air Pollutants
	40 C.F.R. 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
	40 C.F.R. 63 Subpart DDDDD	NESHAPs-MACT for Boilers
State Only:	45CSR4	No objectionable odors

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such. The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

**Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2608D	November 13, 2012	

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**

**NSR Permit Nos. R13-2608C and R13-2608D.** Permit R13-2608C was issued by the Director on September 18, 2012 and permit R13-2608D was issued on November 13, 2012. The following changes have been made in the operating permit to incorporate these underlying permit revisions.

- a. A new control device (FGR/LNB) has been added to the Emission Unit table for the Emissions Unit ID Aux 1.
- b. The permit number alphabetic suffix has been revised, as well as the issue date in permit subsection 1.2.
- c. Changes were made to the citation of condition 3.1.13 due to renumbering.

- d. In conditions 3.3.5 and 3.3.6 the control equipment for Aux 1 was added to the list of control equipment subject to those conditions.
- e. The table below lists Title V permit conditions changed or added based upon the NSR permit revisions.

<b>R13-2608C &amp; 2608D</b>	<b>Title V</b>	<b>Comment</b>
4.1.25	4.1.9	Emissions limits for Aux 1 were added, CO limit modified in 2608D
4.1.26	4.1.10	Requirement added
4.1.27	4.1.11	Requirement added
4.1.28	4.1.12	Requirement added in 2608C and Modified in 2608D
4.1.30	4.1.13	Requirement added
4.1.31	4.1.14	Requirement added
4.1.33	4.1.15	Requirement added
4.1.34	4.1.16	Condition was already in the Title V permit so the citation for the R13 condition was added.
4.1.32	4.1.19	Requirement added
4.1.29	4.1.20	Requirement added
4.2.9	4.2.14	Requirement added though permit citations in the condition were changed from their R13 condition numbers to their respective Title V condition numbers.
4.2.10	4.2.15	Requirement added though permit citations in the condition were changed from their R13 condition numbers to their respective Title V condition numbers.
4.2.11	4.2.16	Requirement added though permit citations in the condition were changed from the R13 condition numbers to their respective Title V condition numbers.
4.3.3	4.3.3	Requirement added though permit citations in the condition were changed from their R13 condition numbers to their respective Title V condition numbers.
4.4.13	4.4.5	Requirement added though permit citation in the condition was changed from the R13 condition number to the respective Title V condition number.
4.4.14	4.4.6	Requirement added though permit citations in the condition were changed from their R13 condition numbers to their respective Title V condition numbers.

- f. Conditions 4.1.9, 4.1.10, 4.1.11, 4.1.12, 4.1.13, 4.1.14, 4.1.15, 4.1.16 were renumbered as 4.1.16, 4.1.17, 4.1.18, 4.1.21, 4.1.22, 4.1.23, 4.1.24, 4.1.25 respectively. The renumbering was done to keep the layout of new conditions in the format used for the rest of the permit.
- g. Due to the renumbering, the Title V permit condition referenced in condition 4.1.17 was changed from 4.1.9 to 4.1.16.
- h. In R13-2608C conditions 4.1.35, 4.1.36, and 4.1.37 were added but were later removed in R13-2608D and therefore were not included in the changes to the Title V permit. Also not included was the R13-2608D condition 4.4.14 that Requires recordkeeping for the purposes of determining compliance with the conditions 4.1.35, 4.1.36, and 4.1.37. Condition 4.1.4 was inadvertently included in R13-2608D although the conditions it references were not.

### **Non-Applicability Determinations**

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

#### **Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.**

Ohio Power Company's Mitchell Plant has not submitted any application for a modification under PSD, therefore the Greenhouse Gas Tailoring Rule does not apply.

### **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: Not Applicable for minor modifications.  
Ending Date: N/A

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

Robert Mullins  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> 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**

Robert Mullins  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1243 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

NA