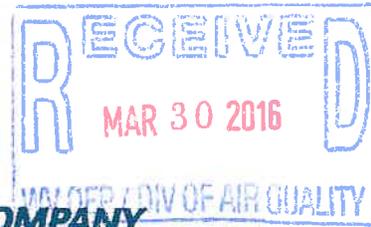




**THE MARION COUNTY COAL COMPANY**



46226 NATIONAL ROAD  
ST. CLAIRSVILLE, OHIO 43950

PHONE: (740) 338-3100  
FAX: (740) 338-3405  
www.murrayenergycorp.com

March 28, 2016

Ms. Beverly D. McKeone  
WV Department of Environmental Protection  
Division of Air Quality  
601 - 57th Street  
Charleston, WV 25304

*Entire Document*  
**NON-CONFIDENTIAL**

**RE: *Marion County Coal Company – Marion County, West Virginia,  
Marion County Preparation Plant – Permit Determination Request***

Dear Ms. McKeone:

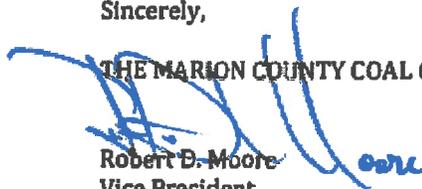
The Marion County Coal Company (MCCC) operates a coal preparation plant located in Marion County, West Virginia. Operations at the Marion County Preparation Plant are permitted under a Title 45 Legislative Rule of the Division of Air Quality (DAQ) Series 13 (45CSR13) construction/modification permit (Permit R13-0760E) and the facility's Title V operating permit (R30-04900019-2014 effective February 7, 2014).

CCC is submitting the enclosed request for a permit determination for the proposed updates to the plant's existing thermal dryer described in Attachment C of the enclosure. As described in Attachment C, MCCC is not requesting an increase in allowable emissions of any pollutant. Further, as detailed in Attachment E of the enclosure, the proposed changes will not result in a significant emissions increase (SEI) for any pollutant. Accordingly, MCCC is requesting authorization to proceed with the proposed changes described in Attachment C without modification of any existing air permits.

\*\*\*

MCCC appreciates your consideration in this matter. Should you have any questions on the specifics of this request, please do not hesitate to contact either Mike Burr of Trinity Consultants at (614) 433-0733 or Crellin Scott of Murray Energy Corporation at 740-338-3100.

Sincerely,

  
THE MARION COUNTY COAL COMPANY

Robert D. Moore  
Vice President

Enclosure

LD. No. 049-00019 - PP16023  
Company MARION CO. COAL CO.  
Facility MARION PREP PLANT (LOWE/DOE)  
Initials RLC



WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Phone: (304) 926-0475  
www.dep.wv.gov/daq

**PERMIT DETERMINATION FORM  
(PDF)**

FOR AGENCY USE ONLY: PLANT I.D. # \_\_\_\_\_

PDF # \_\_\_\_\_ PERMIT WRITER: \_\_\_\_\_

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):

**Marion County Coal Company**

2. NAME OF FACILITY (IF DIFFERENT FROM ABOVE):

**Marion County Preparation Plant**

3. NORTH AMERICAN INDUSTRY  
CLASSIFICATION SYSTEM (NAICS)  
CODE:

2 1 2 1 1 2

4A. MAILING ADDRESS:

**46226 National Road W., St. Clairsville, OH 43950**

4B. PHYSICAL ADDRESS:

**Sugar Run Rd., Fairview, WV, 26570**

5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE MAP AS ATTACHMENT A):

From Fairview Road, head north on State Route 17. After approximately one mile, turn left onto Sugar Run Rd.

5B. NEAREST ROAD:

**Sugar Run Rd**

5C. NEAREST CITY OR TOWN:

**Fairview, WV**

5D. COUNTY:

**Marion**

5E. UTM NORTHING (KM):

**4,383.9**

5F. UTM EASTING (KM):

**561.6**

5G. UTM ZONE:

**17**

6A. INDIVIDUAL TO CONTACT IF MORE INFORMATION IS REQUIRED:

**Crellin Scott**

6B. TITLE:

**Director of Environmental Compliance**

6C. TELEPHONE:

**740-338-3100**

6D. FAX:

**740-338-3146**

6E. E-MAIL:

**cscott@coalsource.com**

7A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY):

0 4 9 - 0 0 0 1 9

7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19  
AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED  
WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY):

**R13-0760E; R30-04900019-2014**

7C. IS THIS PDF BEING SUBMITTED AS THE RESULT OF AN ENFORCEMENT ACTION? IF YES, PLEASE LIST:

**No**

8A. TYPE OF EMISSION SOURCE (CHECK ONE):

- NEW SOURCE     ADMINISTRATIVE UPDATE  
 MODIFICATION     OTHER (PLEASE EXPLAIN IN 11B)

8B. IF ADMINISTRATIVE UPDATE, DOES DAQ HAVE THE  
APPLICANT'S CONSENT TO UPDATE THE EXISTING  
PERMIT WITH THE INFORMATION CONTAINED HEREIN?

YES     NO

9. IS DEMOLITION OR PHYSICAL RENOVATION AT AN EXISTING FACILITY INVOLVED?     YES     NO

10A. DATE OF ANTICIPATED INSTALLATION OR CHANGE:

06 / 20 / 2016

10B. DATE OF ANTICIPATED START-UP:

06 / 27 / 2016

11A. PLEASE PROVIDE A DETAILED PROCESS FLOW DIAGRAM SHOWING EACH PROPOSED OR MODIFIED PROCESS EMISSION POINT AS ATTACHMENT B.

11B. PLEASE PROVIDE A DETAILED PROCESS DESCRIPTION AS ATTACHMENT C.

12. PLEASE PROVIDE MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS PROCESSED, USED OR PRODUCED AS ATTACHMENT D. FOR CHEMICAL PROCESSES, PLEASE PROVIDE A MSDS FOR EACH COMPOUND EMITTED TO AIR.

**ATTACHMENT A: AREA MAP**

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## ATTACHMENT B: PROCESS FLOW DIAGRAM

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compliance test. Since MCCC is not expecting an increase in emissions of any pollutant associated with the rebuild, the projected actual emissions use the same emission factors from the 2011 compliance test. The projected heat input to the furnace assumes that the plant will operate similarly to 2015 in terms of throughput, with no significant increase in demand expected. Regardless, although not expected, any significant increase in demand over the next five (5) years would be entirely unrelated to the proposed changes described herein. Accordingly, any such increase would be excluded from the projections in accordance with 45CSR14-2.63.a.3.

Considering all these factors, MCCC is requesting that WVDEP confirm authorization to proceed with the proposed changes without modification of its existing R13 permit.

Table E-1. Thermal Dryer Baseline to Projected Actual Analysis

**HISTORIC PROCESS DATA**

Baseline Annual Heat Input	571,761 mmbtu/yr ✓
Baseline Period	12/2010 - 11/2012 ✓
Projected Coal Throughput	18,207 tpy ✓
Projected Gas Throughput	148,627 mmscf/yr ✓
Coal Bed Methane Heating Value	607 mmbtu/mmscf
Coal Heating Value	27.25 MMBtu/ton
Projected Annual Heat Input	587,132 MMBtu/yr ✓

Average annual heat input during the baseline period  
 Period during which highest 24-mo rolling heat input to furnace occurred  
 Projected based on 2015 operations including 10% safety factor  
 Projected based on 2015 operations including 10% safety factor  
 Based on analysis from 2011 compliance test  
 Based on analysis from 2011 compliance test  
 = Projected Coal Throughput (tpy) \* Coal HHV (MMBtu/ton) + Projected Gas Throughput (mmscf/yr) \* Gas HHV (mmbtu/mmscf)

**EMISSION FACTORS**

SO <sub>2</sub>	1.2 lb/MMBtu coal
NO <sub>x</sub>	0.44 lb/MMBtu
CO	0.21 lb/MMBtu
PM	0.15 lb/MMBtu
VOC	0.4 lb/MMBtu

From 2011 compliance test 120  
 From 2011 compliance test 116  
 From 2011 compliance test 116  
 From 2011 compliance test 120  
 From 2011 compliance test 115

**BASELINE ACTUAL EMISSIONS (BAE)**

SO <sub>2</sub>	353.9 tpy
NO <sub>x</sub>	124.64 tpy
CO	60.00 tpy
PM	44.16 tpy
VOC	109.2 tpy

= Baseline Annual Heat Input (MMBtu/yr) \* SO<sub>2</sub> Emission Factor (lb/MMBtu)  
 = Baseline Annual Heat Input (MMBtu/yr) \* NO<sub>x</sub> Emission Factor (lb/MMBtu)  
 = Baseline Annual Heat Input (MMBtu/yr) \* CO Emission Factor (lb/MMBtu)  
 = Baseline Annual Heat Input (MMBtu/yr) \* PM Emission Factor (lb/MMBtu)  
 = Baseline Annual Heat Input (MMBtu/yr) \* VOC Emission Factor (lb/MMBtu)

**PROJECTED ACTUAL EMISSIONS (PAE)**

SO <sub>2</sub>	363.4 tpy
NO <sub>x</sub>	127.99 tpy
CO	61.61 tpy
PM	45.35 tpy
VOC	112.1 tpy

= Projected Annual Heat Input (MMBtu/yr) \* SO<sub>2</sub> Emission Factor (lb/MMBtu)  
 = Projected Annual Heat Input (MMBtu/yr) \* NO<sub>x</sub> Emission Factor (lb/MMBtu)  
 = Projected Annual Heat Input (MMBtu/yr) \* CO Emission Factor (lb/MMBtu)  
 = Projected Annual Heat Input (MMBtu/yr) \* PM Emission Factor (lb/MMBtu)  
 = Projected Annual Heat Input (MMBtu/yr) \* VOC Emission Factor (lb/MMBtu)

**PROJECTED EMISSIONS INCREASES**

Pollutant	PEI <sup>a</sup> (tpy)	SER (tpy)
SO <sub>2</sub>	9.5	40
NO <sub>x</sub>	3.35	40
CO	1.61	100
PM	1.19	15 PM <sub>1.0</sub> 10 PM <sub>2.5</sub>
VOC	2.9	40

<sup>a</sup> Projected Emissions Increase (PEI) = Pollutant PAE - Pollutant BAE

Date	Coal Fired (tons)	Gas Fired (Mcf)	Rolling 24-mo Coal Fired (tons)	Rolling 24-mo Gas Fired (Mcf)	Furnace Heat Input <sup>a</sup> (MMBtu)	Rolling 24-mo Furnace Heat Input (MMBtu)
Feb-13	893	11,334	31,977	407,053	31,252	1,119,819
Mar-13	1,259	12,362	31,865	396,544	41,870	1,110,387
Apr-13	1,497	14,388	31,996	388,626	49,591	1,109,156
May-13	1,277	9,636	31,974	379,097	40,702	1,102,772
Jun-13	1,052	6,954	31,969	373,139	32,933	1,099,019
Jul-13	670	4,742	31,584	364,173	21,173	1,083,077
Aug-13	1,180	9,163	31,190	350,848	37,760	1,064,229
Sep-13	1,366	8,028	31,287	343,825	42,155	1,062,613
Oct-13	1,405	7,968	32,034	342,978	43,183	1,082,486
Nov-13	991	5,741	31,961	335,739	30,533	1,076,101
Dec-13	1,259	6,558	31,721	324,571	38,342	1,062,772
Jan-14	1,356	10,745	31,424	315,316	43,531	1,049,048
Feb-14	1,359	5,584	31,439	303,894	40,480	1,042,524
Mar-14	1,353	7,916	31,506	293,941	41,732	1,038,311
Apr-14	1,286	9,412	31,480	286,669	40,817	1,033,193
May-14	1,340	9,407	31,581	280,337	42,283	1,032,107
Jun-14	1,308	9,501	31,666	275,599	41,466	1,031,551
Jul-14	1,254	13,166	31,768	274,247	42,217	1,033,514
Aug-14	1,638	12,918	31,855	268,248	52,551	1,032,224
Sep-14	1,444	7,014	32,067	256,918	43,665	1,031,130
Oct-14	1,405	7,648	31,395	242,360	42,989	1,003,953
Nov-14	1,240	9,159	30,558	232,856	39,402	975,339
Dec-14	1,704	13,837	30,963	231,807	54,906	985,756
Jan-15	1,480	13,247	31,017	226,427	48,436	983,967
Feb-15	1,558	14,114	31,682	229,208	51,089	1,003,804
Mar-15	1,550	12,367	31,972	229,212	49,810	1,011,745
Apr-15	1,678	13,185	32,153	228,009	53,789	1,015,944
May-15	1,599	14,942	32,475	233,315	52,722	1,027,963
Jun-15	1,334	11,336	32,757	237,696	43,278	1,038,308
Jul-15	1,416	11,639	33,503	244,594	45,707	1,062,842
Aug-15	998	9,617	33,320	245,048	33,062	1,058,145
Sep-15	1,204	9,734	33,158	246,754	38,755	1,054,745
Oct-15	1,395	9,801	33,148	248,587	44,020	1,055,582
Nov-15	1,219	8,669	33,376	251,516	38,532	1,063,582
Dec-15	1,122	6,461	33,239	251,419	34,555	1,059,795
Jan-16	1,383	9,244	33,266	249,918	43,361	1,059,624
Feb-16	631	5,128	32,538	249,462	20,331	1,039,475

<sup>a</sup> Calculated using heating values of 13,646 Btu/lb for coal and 607 btu/scf obtained from analyses performed during the 2011 compliance test.