

Fact Sheet



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

Permit Number: **R30-00900002-2015**
Application Received: **July 7, 2014**
Plant Identification Number: **009-00002**
Permittee: **Mountain State Carbon, LLC**
Facility Name: **Follansbee Plant**
Mailing Address: **1851 Main Street, Follansbee, WV 26037**

Revised: N/A

Physical Location: Follansbee, Brooke County, West Virginia
UTM Coordinates: 533.41 km Easting • 4465.76 km Northing • Zone 17
Directions: One mile north of Follansbee on West Virginia Route 2 along the eastern bank of the Ohio River

Facility Description

The Mountain State Carbon, LLC (MSC) Follansbee Plant is a coke facility that produces metallurgical-grade coke and coke gas byproducts (light oil, ammonium sulfate, fuel gas, coal tar, sulfuric acid) from coal for use at off-site steel facilities and for commercial sales. This operation involves four coke oven batteries for coke production. In addition, the facility operates a by-product plant that recovers chemicals from the process and prepares the coke oven gas for use as fuel. The Follansbee plant also operates a material storage area located to the west. The maximum capacity of the coke plant is 174.9 tons per hour and 1,535,000 tons per year of coke output with 249.8 tons per hour and 2,190,000 tons per year of coal input. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week. The facility operates under SIC code 3312 and NAICS code 314199.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions*	2013 Actual Emissions
Carbon Monoxide (CO)	29,138.62	9959.18
Nitrogen Oxides (NO _x)	807.00	480.66
Particulate Matter (PM _{2.5})	157.98	23.68
Particulate Matter (PM ₁₀)	270.85	143.60
Total Particulate Matter (TSP)	900.57	174.10
Sulfur Dioxide (SO ₂)	2,723.57	467.94
Volatile Organic Compounds (VOC)	2,489.90	118.12
Lead	0.023	0.007

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2013 Actual Emissions
Benzene	742.12	19.67
Coke Oven Emissions	995.53	7.83
Cyanide Compounds	30.76	0.825
Ethylbenzene	8.75	0.25
Manganese	1.25E-04	0.00
Naphthalene	7.98	1.77
Phenol	5.11	1.28
Toluene	120.76	3.46
Xylene	32.05	0.91

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

**The change in Potential Emissions is attributed to the replacement of Boiler #8 and the inclusion of the Murphy screening facility recently purchased by Mountain State Carbon.*

Title V Program Applicability Basis

This facility has the potential to emit over 100 tons per year of Carbon Monoxide (CO), Nitrogen Oxides (NO_x), Particulate Matter (PM₁₀), Sulfur Dioxide (SO₂), and Volatile Organic Compounds (VOC) and over 10 tons per year of Benzene, Coke Oven Emissions, Cyanide Compounds, Toluene and Xylene. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Mountain State Carbon, LLC 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:

45CSR2	To Prevent And Control Particulate Air Pollution From Combustion Of Fuel In Indirect Heat Exchangers
45CSR6	Control Of Air Pollution From Combustion Of Refuse
45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations
45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers.
45CSR11	Prevention Of Air Pollution Emergency Episodes
45CSR13	Permits For Construction, Modification, Relocation And Operation Of Stationary Sources Of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, And Procedures For Evaluation
45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
45CSR20	Good Engineering Practice as Applicable to Stack Heights
45CSR30	Requirements For Operating Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
45CSR38	Provisions For Determination Of Compliance With Air Quality Management Rules
40 C.F.R. Part 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. Part 61 Subpart L	National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants
40 C.F.R. Part 61 Subpart M	Asbestos inspection and removal
40 C.F.R. Part 61 Subpart V	National Emission Standard for Equipment Leaks (Fugitive Emission Source)
40 C.F.R. Part 61 Subpart FF	National Emission Standard for Benzene Waste Operation
40 C.F.R. Part 63 Subpart L	National Emission Standards for Coke Oven Batteries
40 C.F.R. Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63 Subpart CCCCC	National Emission Standards for Coke Ovens: Pushing, Quenching, and Batteries Stacks
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 80 Subpart I	Motor Vehicle, Nonroad, Locomotive, and Marine Diesel Fuel
40 C.F.R. Part 82 Subpart F	Ozone depleting substances
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.

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>)
R13-0090	July 12, 1974	
R13-1652	September 2, 1994	
R13-1939A	August 19, 2003	
R13-2591D	April 18, 2014	
R13-2632	September 28, 2005	
R13-2772	September 17, 2008	
R13-2798	July 13, 2009	
R13-2548A	July 20, 2005	
CO-SIP-91-29	November 14, 1991	

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

Venturi Scrubber and Capture System

The operating limits established for the venturi scrubber and capture system as required by 40 CFR §63.7323 and permit condition 4.1.35.8. are as follows: Based on the test conducted December 2014: fan motor amperage is 158, pressure drop is 18 inches of water, and water flow is 837 gallons per minute.

This is a renewal of the Title V permit which was issued on January 5, 2010. Substantial changes to the most recent version of the Title V Permit consist of the following, which includes R13-2591D issued on April 18, 2014:

1) Title V Boilerplate changes

- Condition 2.1.4. – The word “monthly” was added to the definition of “rolling yearly total.”

- Condition 3.3.1. – Subsection “d” was added to this condition. Also section 14 of WV Code §22-5-4 (a) was added in the citation of authority.
 - Condition 3.5.3. - The USEPA address and office name were updated in in this condition.
- 2) **Condition 1.1.** – The “Emission Units” table was updated as follows:
- Revised the Boiler #8 (P-019) installation date and design capacity to reflect the newly replaced boiler authorized under Permit R13-2591D.
 - Added diesel fired emergency generators E6 and E7. They previously did not have any applicable requirements but are now subject to 40 CFR 63 Subpart ZZZZ.
 - Added the Screening Stations which were just recently purchased from Murphy Consolidated Industries, Inc. (hereinafter called, "Murphy"). Murphy operated two coke screening stations as a "support facility" to the Mountain State Carbon, LLC’s (MSC) Follansbee Plant and held a separate Title V permit. The Murphy Permits have been transferred to MSC and the applicable requirements associated with the screening stations have been added to the MSC Title V permit.
 - The residual material storage piles (in Group 008 of the permit) have been eliminated due to either being located on the south portion of the property that was sold; or are no longer being used. Therefore Group 008 has been deleted from the table.
 - Other miscellaneous changes were made to more accurately describe the emission units and to match the renewal application.
- 3) **Condition 1.2.** – The “Active R13, R14, and R19 Permits” table was updated for R13-2591D and to add R13-2548A (Murphy screening stations).
- 4) **Conditions 3.1.9. and 3.1.11.** – The citation of authority was updated to include Permit R13-2548.
- 5) **Conditions 3.1.13. and 3.1.14.** – The language in these conditions was updated to match the language in permit R13-2548 and Rule 7. Also the citation of authority was updated to include Permit R13-2548.
- 6) **Condition 3.4.1.** – The citation of authority was updated to include Permits R13-2548, 2591, 2632, 2772, and 2798.
- 7) **Condition 3.7.2.** – The mobile screen engines are subject to 40 CFR 60 Subpart IIII and Boiler #8 is subject to 40 CFR Part 63 Subpart DDDDD. Therefore these subparts have been removed from this condition.
- 8) **Condition 4.1.5.** – §(3) of this condition took effect on January 1, 2010 rendering §(2)(i) obsolete. Therefore, §(2)(i) has been deleted. Also for clarification at the company’s request, “(No.8 Battery)” was added to §(3)(i) and “(Nos. 1, 2, and 3 Batteries)” was added in §(3)(ii).
- 9) **Condition 4.1.35.** – At the company’s request, “4.1.35.” was added to each of the main subsection numbers (e.g., “1.” became “4.1.35.1.”).
- 10) **Condition 4.1.37.** – This requirement, contained in R13-2591C was deleted in R13-2591D. Therefore reference to condition 4.1.36. in this condition has been deleted. Also R13-2591 has been deleted from the citation of authority.

- 11) **Condition 4.1.35.8.** – By meeting the requirements of 40 CFR §63.7323(e)(1) through (3), the venturi scrubber and the capture system site-specific operating limits can change several times throughout the permit term. Therefore, the “Note” containing the operating limits in this condition has been removed from the permit and added to the fact sheet (see above). By including them in the fact sheet and not the permit, a permit modification will not be required whenever the limits are changed.
- 12) **Condition 4.2.8.** – Added new condition from R13-2591D
- 13) **Condition 4.3.8** – Added “Such records shall be maintained in accordance with Condition 3.4.2. of this permit” from R13-2591D
- 14) **Condition 4.3.9.** – At the company’s request, “4.3.9.” was added to each of the main subsection numbers (e.g., “1.” became “4.3.9.1.”).
- 15) **Condition 4.4.4.** – Added new condition from R13-2591D.
- 16) **Condition 5.1.1.** – Corrected the citation of authority in which the incorrect R13 permit was cited.
- 17) **Condition 5.1.5.** – Revised the Rule 2 lb/hr limit for all five boilers (including the revised heat input for the new boiler #8). The current permit incorrectly listed only three boilers.
- 18) **Conditions 5.1.16. and 5.1.17.** – Condition 5.1.16. and condition 5.1.17. of the current permit contain identical requirements for boilers #9 and #10 respectively. At the company’s request “Boiler #10” was added to condition 5.1.16. and condition 5.1.17. has been deleted. Subsequent permit conditions have been renumbered. Consequently, any reference to these conditions elsewhere in the permit has been revised.
- 19) **Condition 5.1.18. (previously 5.1.19)** – This condition has been updated for the new requirements from R13-2591D for the replacement boiler #8.
- 20) **Conditions 5.1.19. and 5.1.20.** – These conditions have been added to incorporate R13-2591D and 40 CFR 63 Subpart DDDDD requirements.
- 21) **Previous Condition 5.1.20.** – This condition was not included in R13-2591D and therefore has been deleted from the Title V permit.
- 22) **Previous Condition 5.1.21.** – This condition contained conditional language regarding the Boiler MACT promulgation and has become obsolete. Therefore it has been deleted. The Boiler MACT Requirements have been incorporated into this renewal permit for Boiler #8.
- 23) **Condition 5.2.3.** – Since this requirement is from R13-2591D, “45CSR§30-5.1.c.” was removed from the citation of authority.
- 24) **Condition 5.2.4.** – This is a new condition from R13-2591D.
- 25) **Condition 5.4.4.** – This condition has been revised to include the language from R13-2591D.
- 26) **Condition 5.4.5.** – This condition was not included in R13-2591D. MSC has requested this condition be included in the permit. Therefore the citation of authority has been changed to 45CSR§30-12.7.
- 27) **Condition 5.4.6.** – This condition has been added for boiler Nos. 6, 7, 9, and 10 associated with 40 CFR 63 Subpart DDDDD. The boilers have been determined not to be subject to this MACT.

However if the percent of coke oven gas (as primary fuel) drops below 50 % for any of the boilers, that particular boiler will become an affected source subject to Subpart DDDDD.

- 28) **Conditions 5.5.2. and 5.5.3** – These conditions have been added as new conditions from R13-2591D.
- 29) **Section 6.0.** – This section has been modified to include the requirements applicable to the two screening stations recently acquired from Murphy Consolidated Industries, Inc. (see discussion in the third bullet under item 2 above)
- 30) **Section 9.0.** – Two existing emergency generators (E6 and E7) were added to this section to incorporate the requirements of 40 CFR 63 Subpart ZZZZ (RICE MACT). The RICE MACT requirements for these generators were added in conditions 9.1.8.- 9.1.10., 9.4.3., 9.5.1., and 9.5.2. Furthermore, conditions 9.1.9. and 9.1.10. are also applicable to emergency generator E1 and emergency air compressor E5.
- 31) **Condition 9.1.6** – The requirements of this condition have been removed in the revised R13-2591D permit. Therefore “9.1.5.” and the R13-2591D citation of authority have been removed from this condition.
- 32) **APPENDIX A –Attachment 1** – The address and telephone number were updated.
- 33) **APPENDIX A –Attachment 3** – The name of a specific monitor (i.e., “*Analytical Specialties True Peak Laser H₂S Monitors*”) was deleted to allow for the flexibility of replacing the monitors without requiring a Title V permit modification.
- 34) **APPENDIX C** – Deleted the unpaved roadways and areas that are no longer on MSC’s property or under MSC’s ownership or control, with the exception of road segment “V” which has been paved. Road segment “V” has been added to Table 2.

40 CFR Part 60, Subpart Dc

Newly installed Boiler #8 is a used unit that was manufactured in 1993. This manufacturing date makes the replacement unit an affected source under Subpart Dc of Part 60 (NSPS). Because it is natural gas fired, the only requirement is for monthly fuel usage records. This requirement is contained in permit condition 5.2.4.

40 CFR 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*

- MSC Boiler #8 is subject to 40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 to 63.7575) National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers for Major Sources (Boiler MACT). Boiler # 8 is an existing unit and considered an affected source pursuant to §63.7490(a). Boiler #8 combusts natural gas only.

The compliance requirements for boiler # 8, firing Gas 1 fuel without continuous oxygen trim, includes:

- Initial and annual tune-ups (63.7540)
- One-time energy assessment (63.7575).

- MSC Boilers No. 6, 7, 9 and 10, burn coke oven gas (COG) and natural gas. COG at MSC is vented into the coke oven gas fuel system and conveyed to the boilers which destroy Benzene and other contaminants. During the past three consecutive calendar years each of these boilers have burned coke oven gas at a rate greater than 50% of their average annual heat input. The coke oven gas fired in the

boilers comes from the “Coke By-Product Recovery Plant” and is regulated by another subpart (i.e., 40 CFR 61 Subpart L). Because COG is otherwise regulated, by 40 CFR 61 Subpart L, these boilers are not subject to 40 CFR 63 Subpart DDDDD pursuant to 40 CFR §60.7491(i). If the average annual heat input of coke oven gas during any 3 consecutive calendar years falls below 50 percent for any boiler, then that boiler will be subject to 40 CFR 63 Subpart DDDDD.

Condition 5.4.6. has been added in order to maintain records of the average annual heat input of each fuel.

40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

- MSC’s emergency generator (E1) and emergency air compressor (E5) engines are new stationary compression ignition (CI) RICEs greater than 500 HP located at a major source of HAP emissions and therefore are subject to Subpart ZZZZ. These requirements have been included in Section 9.0 of the permit.
- MSC’s emergency generators (E6) and (E7) are existing emergency stationary compression ignition (CI) RICE less than 500 HP located at a major source of HAP emissions and therefore are subject to Subpart ZZZZ. These requirements have been included in Section 9.0 of the permit.
- The internal combustion engines powering the mobile screen unit and radial stacking conveyor are new stationary compression ignition (CI) RICE less than 500 HP located at a major source of HAP emissions. Therefore pursuant to 40 CFR §63.6590(c)(6), to meet the requirements of Subpart ZZZZ, the engine must meet the requirements of 40 CFR Part 60 Subpart III. The engines are EPA certified compliant engines and therefore comply with Subpart III. The requirements of 40 CFR §60.6590(c)(7) have been included in permit condition 6.1.14.

40 CFR 60, Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

- The internal combustion engines powering the mobile screen unit and radial stacking conveyor are diesel fired engines of 110 HP and 48 HP. They were manufactured after July 11, 2005 and are therefore subject to the requirements of Subpart III. These requirements are included in the Title V permit in conditions 6.1.12, 6.1.15., and 6.1.16.

The engines are EPA certified engines and therefore meet the requirements of 40 CFR §60.4211(c). As long as these engines are installed, configured, operated and maintained according to the manufacturers emission-related written instructions, they are not subject to 40 CFR §60.4211(g) for compliance testing.

The engines are not equipped with a diesel particulate filter to comply with the emission standards in 40 CFR §60.4204 and therefore 40 CFR §60.4209(b) is not applicable.

40 CFR Part 64– Compliance Assurance Monitoring

This is a 2nd renewal. Since CAM was addressed in the first renewal and there were no modifications to the facility that would have triggered a CAM review subsequent to the first renewal, a CAM evaluation was not made.

Non-Applicability Determinations

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

45CSR33	Acid Rain Provisions and Permits do not apply to Mountain State Carbon LLC because it is not considered a Title IV (Acid Rain) Source.
40 C.F.R. Part 60 Subpart Cd	Standards of Performance for Sulfuric Acid Production plants Emissions Guidelines and Compliance times does not apply because Mountain State Carbon LLC does not meet the definition of a sulfuric acid production unit as defined in 40 C.F.R. § 60.81 (a).
40 C.F.R. Part 60 Subpart D	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after August 17, 1971 does not apply because Mountain State Carbon LLC boilers are less than the applicability size of 250 mm Btu/hr.
40 C.F.R. Part 60 Subpart Da	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after September 18, 1978 does not apply because Mountain State Carbon LLC boilers are less than the applicability size of 250 mm Btu/hr.
40 C.F.R. Part 60 Subpart Db	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after June 19, 1984 does not apply because Mountain State Carbon LLC boilers are less than the applicability size of 100 mm Btu/hr.
40 C.F.R. Part 60 Subpart E	Standards of Performance for Incinerators for which construction is commenced after August 17, 1971 does not apply because Mountain State Carbon LLC does not operate equipment defined as incinerators (under 40 C.F.R. §60.51).
40 C.F.R. Part 60 Subpart H	40 CFR Part 60 NSPS Subpart H Standards of Performance for Sulfuric Acid Production plants does not apply because Mountain State Carbon LLC (MSC) does not meet the definition of a sulfuric acid production unit as defined in 40 C.F.R. § 60.81 (a). MSC is a metallurgical plant that uses the H ₂ SO ₄ plant as a control device to reduce sulfur compound emissions, such as H ₂ S.
40 C.F.R. Part 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 does not apply because Mountain State Carbon LLC has not installed any tanks between these dates with a storage capacity greater than 40,000 gallons.
40 C.F.R. Part 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 does not apply because Mountain State Carbon LLC has not installed any tanks between these dates.
40 C.F.R. Part 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 does not apply because Mountain State Carbon LLC is exempt by paragraph 40 C.F.R. §60.110b(d)(1) [for vessels at coke oven by-product plants].
40 C.F.R. §§60.251 - 60.254 Subpart Y	Standards of Performance for Coal Preparation Plants does not apply because Mountain State Carbon LLC commenced construction or modification of their coal facilities prior to October 24, 1974.
40 C.F.R. Part 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.

40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines does not apply because Mountain State Carbon LLC does not operate engines with spark ignitions that were manufactured after July 1, 2008.
40 C.F.R. Part 61 Subpart J	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) of Benzene is not applicable to sources located in coke by-product plants and therefore does not apply to Mountain State Carbon LLC.
40 C.F.R. Part 61 Subpart Y	National Emission Standards for Benzene Emissions from Benzene Storage Vessels is not applied to storage vessels used for storing benzene at a coke by-product facility and therefore does not apply to Mountain State Carbon LLC.
40 C.F.R. Part 61 Subpart BB	National Emission Standards for Benzene Emissions from Benzene Transfer Operations is not applicable to benzene-laden liquid from coke by-product recovery plants and therefore does not apply to Mountain State Carbon LLC.
40 C.F.R. Part 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart I	National Emission Standards for Organic Hazardous Air Pollutants related to Equipment Leaks does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers does not apply to Mountain State Carbon LLC because the facility does not use chromium-based water treatment chemicals.
40 C.F.R. Part 63 Subpart Y	National Emission Standards for Hazardous Air Pollutants for Marine Tank Vessel Loading Operations does not apply to Mountain State Carbon LLC because the vapor pressure of the light oil is less than 1.5 psia at standard conditions of 20 deg. C and 760 mmHg and is therefore exempt from the rule.
40 C.F.R. Part 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) does not apply to Mountain State Carbon LLC because the facility components are subject to another NESHAP (Subparts L, V, and FF) as per 40 C.F.R. §63.2338(c)(1).
40 C.F.R. Part 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing does not apply to Mountain State Carbon LLC since 40 CFR §63.2435(b)(1) is not satisfied. The facility does not produce ammonium sulfate via caprolactam as per 40 C.F.R. §63.2435(b)(1)(iii) nor materials or family of materials listed in 40 C.F.R. §§63.2435(b)(1)(i), (ii), (iv) or (v).
40 C.F.R. Part 63 Subpart GGGGG	National Emission Standards for Hazardous Air Pollutants: Site Remediation does not apply to Mountain State Carbon LLC because the facility received an Administrative Order under Section 3008(h) of the Resource Conservation and Recovery Act from USEPA to perform RCRA corrective Actions.

40 C.F.R. Part 64	The potential PSEU's at the facility are for PM emissions from the coke oven Batteries #1, #2, #3 and #8 pushing and quenching processes. The controls for Batteries #1, #2, and #3 include a Shed, Baghouse, and Quench Baffles. The controls for Battery #8 include a Mobile Hood, a Venturi Scrubber, and two Quench Baffle Towers. The batteries are subject to 40 CFR 63 Subpart L and 40 CFR 63 Subpart CCCCC both of which were proposed after November 11, 1990. Therefore they are exempt pursuant to 40 CFR§64.2(b)(1)(i).
40 C.F.R. Part 68 Subpart A & C	Chemical Action Prevention Provisions do not apply to Mountain State Carbon LLC as none of the regulated materials exist above the threshold limits.
40 C.F.R. Part 72	Acid Rain Program General Provisions does not apply to Mountain State Carbon LLC because it is not considered a Title IV (Acid Rain) Source.

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: May 22, 2015

Ending Date: June 22, 2015

Point of Contact

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

Frederick Tipane
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Division of Air Quality
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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)

Comments were received from Mr. Russell J. Dudek on behalf of Mountain State Carbon, LLC (MSC) on June 22, 2015 regarding the "Draft" permit. Comments were also received from Mr. Paul Wentworth of US EPA Region III (EPA) on July 6, 2015 regarding the "Proposed" permit.

As a result of the comments received, revisions to the Draft/Proposed have been made as follows:

Revisions made to the Draft/Proposed permit as a result of MSC comments:

- Table 1.1 Corrected the information for the emergency air compressor and the standby emergency generator as follows:

E1 E5	S26 S6	Emergency Diesel Fired Air Compressor	2005	600 527 hp
E5 E4	S6 S26	Standby Diesel Fired Emergency Generator	2004	527 600 hp

- Section 1.2 Permit R13-2548A corrected issuance date to July 28, 2005
- Condition 3.1.15. Added (i.e., 45CSR7) after “this Rule” for clarity.
- Condition 3.1.23. Added (i.e., 45CSR10) after “this Rule” for clarity.
- Condition 3.1.29. This condition was duplicative of Condition 3.1.23 and therefore deleted.
- Condition 3.1.34. The language has been updated to match the that of the underlying requirement of condition 2.5.1. in Permit R13-2591D.
- Condition 3.2.1. Since the requirements in 3.2.1.a. are for fugitive particulate emissions, “fugitive particulate emissions” has been added to the first paragraph as requested.
- Condition 3.4.4. The date of submission of the monitoring plan has been deleted and the first sentence of this condition has been revised to read: “In accordance with the permittee’s current 45CSR10 Monitoring Plan, the permittee will maintain sulfur content statements on-site for a period of at least five (5) years in accordance with 45CSR10A, Section 7.”
- Condition 4.1.5. Since “§(b)(7)” does not exist in 40 CFR §63.304(b) and appears to be a typographical error in the federal regulation, it has been removed as requested.
- Condition 4.1.6. The first paragraph and 4.1.6.(2) have been revised to the actual 40 CFR §63.306(a) rule language as requested. The implementation requirements of 40 CFR §63.306(c) are contained in condition 4.1.8. and therefore have been deleted from 4.1.6.
- Condition 4.1.8. The typo “(i)” for the second condition was corrected to “(ii)” under §(1).
- Condition 4.1.20. The language has been updated with the current language of the federal regulation.
- Condition 4.1.31. The requirements of this condition are from 45CSR§7-3.3. and are applicable to an “Existing By-Product Coke Production Facility” and therefore applicable to Batteries 1, 2, and 3. Battery 8, is considered to be a “New By-Product Coke Production Facility” subject to the requirements of 45CSR§7-3.4. Hence, as requested, the designation “(Batteries 1, 2, and 3)” has been added to the 45CSR§7-3.3 requirements and the requirements of 45CSR§7-3.4 have been added to the permit with the designation that they are applicable to Battery 8. Subsection “(1)” has been added to the existing requirements (i.e., 45CSR§7-3.3.) and subsection “(2)” has been added for the new requirements (i.e., 45CSR§7-3.4.).

Also language from R13-2772, 4.1.4.b. and the citation of authority for R13-2772, 4.1.4.b. has been added to 4.1.31.(1)g. The citation of authority for R13-2591, 4.1.11.c has been added to 4.1.31.(2)g.

- Condition 4.1.35. The description language of this condition has been revised as requested. Since this condition is applicable to the pushing and battery stacks as well as the quenching operations, “pushing” and “battery stacks” have been added to the language. Also since the only requirements applicable to the quench towers are contained in condition 4.1.35.4., “Source 1E, P004-6, and P004-7” has been replaced with “Batteries 1, 2, 3, and 8” for clarity.
- Condition 4.1.35.1. These requirements are for capture systems and control devices applied to the pushing emissions. Therefore, “1E” has been replaced with “C01” and “P004-6 and P4007” has been replaced with “C02.”
- Condition 4.1.35.2.(a)(5) As requested, clarified that Batteries 1, 2, and 3 are short batteries less than 5m and that Battery 8 is a tall battery equal to or greater than 5m.
- Condition 4.1.35.4. The streamlining language with condition 4.1.36.(3) in §(a)(1)(i) of this condition was removed since it pertains to the make-up water and not the water used for quenching. Because they are two different requirements they cannot be streamlined.

As requested, the language for “acceptable makeup water” has been added in §(a)(2) and removed from condition 4.1.36(2) and 4.1.40.a. so that it is not duplicated throughout the permit. Also citation of authority was added to §(a)(2) for Subpart CCCCC, permit R13-2591 and permit R13-2772. Condition 4.1.36.(2) has been revised to “Reserved”.

The citation of authority from permit R13-2772, 4.1.4. with any appropriate language changes was also added to §§(a)(1)(i), (b)(1), and (b)(2)(i). Condition 4.1.40 containing R13-2772, 4.1.4 requirements has been deleted and the subsequent conditions renumbered. Any references to condition 4.1.40 have been updated to the corresponding condition for which the requirement has been moved.

- Condition 4.1.35.8. As requested, replaced “P004-6 and P004-7” with “C02” in §(a) and “1E” with “C01” in §(c) since these requirements are applicable to the control devices.
- Condition 4.1.36. As requested, the requirements of 4.1.36.(2) have been incorporated in condition 4.1.35.4. (see above) and §(2) is now shown as “Reserved.” Similarly, the requirements of 4.1.36.(3) have been incorporated in condition 4.1.31. (see above) and §(3) is now shown as “Reserved.” Since the only requirement from Subpart CCCCC was in §(2), “45CSR34, 40 C.F.R. Part 63 Subpart CCCCC” has been removed from the citation of authority.
- Condition 4.1.40. The comment states that the requirements of this condition are contained in conditions 4.1.31. and 4.1.35.4. However, not all of the requirements of 4.1.40 were contained in 4.1.31. and 4.1.35.4. As a result of the comment, conditions 4.1.31. and 4.1.35.4. have been revised to incorporate all of the requirements of 4.1.40. Condition 4.1.40. has been removed from the permit.
- Condition 4.2.4. As requested, since this condition is not applicable only to the quenching operation, the description language has been revised to include “pushing”, “and battery stacks” operations. “Source 1E, P004-6 and P004-7” has been replaced with “Batteries 1, 2, 3 and 8.” Since §§1.(b) and 4(b) are applicable to the scrubber, “P004-6 and P004-7” has been replaced with “C02.”
- Condition 4.2.8. This condition was duplicative of Condition 4.3.8. and therefore deleted.
- Condition 4.3.8. For clarity, “(for Battery No. 8)” has been added at the end of this condition.
- Condition 4.3.9. As requested, since this condition is not applicable only to the quenching operation, the description language has been revised to include “pushing,” “and battery stacks” operation, and “Source 1E, P004-6 and P004-7” has been replaced with “Batteries 1, 2, 3 and 8.”

The testing requirement of §4.3.9.1.(a) has been fulfilled rendering this condition as obsolete. Therefore as requested it has been deleted.

Where the requirements specify a control device, the quench tower designations “1E” and “P004-6 and P004-7” have been replaced with “C01” and “C02” respectively for the baghouse and scrubber. The limits in §4.3.9.6.(a)(1) and (2) are applicable to the control device and therefore “P004-5” has been replaced with “C02.”

- Condition 4.3.10. For clarity, “(for Battery Nos. 1, 2, and 3)” has been added at the end of this condition.
- Condition 4.4.5. As requested, since this condition is not applicable only to the quenching operation, the description language has been revised to include “pushing,” “and battery stacks” operation, and “Source 1E, P004-6 and P004-7” has been replaced with “Batteries 1, 2, 3 and 8.”
- Condition 4.5.5. As requested, since this condition is not applicable only to the quenching operation, the description language has been revised to include “pushing,” “and battery stacks” operation, and “Source 1E, P004-6 and P004-7” has been replaced with “Batteries 1, 2, 3 and 8.” Also for the same reason, “(1E, P004-6 and P004-7)” has been removed from §6.(e).

The requirements of R13-2591, 4.5.2 are only applicable to the boilers and are included in Section 5.5.5. Therefore “45CSR13, R13-2591, 4.5.2.” has been removed from the citation of authority.

- Condition 5.1.1. The language in the draft/proposed permit was the language of 45CSR§2-3.1, with a citation of authority from R13-2591D §4.1.6. These requirements are basically the same as those in condition 4.1.6. of permit R13-2591D. It is appropriate to use the R13 permit language and therefore, this condition has been updated as requested.
- Condition 5.1.18. The typo for “item d” has been corrected to “item (4).”
- Condition 5.4.4. Corrected condition “4.1.1.c” typo to condition “5.1.19.”
- Condition 6.0. The description of the emission unit groups has been revised as requested to match the equipment table subcategories. The request to remove the selected emission point IDs is denied since these emission points are contained in a construction permit.
- Condition 6.2.3.c. Since the initial requirements in condition 6.2.3.c. have been met this condition has been revised as follows:

~~Within 60 days of the issuance of permit R13-2548A,~~ ~~the~~ permittee must ~~obtain~~ establish the average weight of 10 scoops ~~taken within one week.~~ Obtaining this 10 scoop average shall be coordinated with DAQ permitting and enforcement to allow an opportunity for representatives of either or both to be present during any loading and weighing.

- Condition 7.1.2. The typo “7.1.7” has been corrected to “7.1.6.” 7.4.5. is a record keeping requirement and therefore not added to this condition.
- Condition 7.1.13. The typo “7.1.7” has been corrected to “7.1.6.”
- Conditions 7.4.3. and 7.4.4. Since these terms are reporting requirements, they have been moved to Section 7.5. Conditions 7.4.3. and 7.4.4. are now 7.5.1. and 7.5.2. Condition 7.4.5. has been

- renumbered as 7.4.3. Any references to 7.4.3., 7.4.4 and 7.4.5. throughout the permit have been revised to reflect the new condition numbers.
- Section 8. For clarity, the type of equipment (e.g., pumps, valves, pressure relief devices, etc.) has been added to the various conditions that did not specify the equipment subject to a particular requirement.
 - Condition 8.1.14. The typo in this condition was carried over from permit R13-1939A. The term “thermal oxidizer” has been replaced with “flare.”
 - Condition 8.1.40. §61.135(b) of 40 CFR 61 Subpart L has been added as condition 8.1.40. This requirement was not previously included in the Title V permit but is applicable to the facility. It states that the provisions of 40 CFR §61.242-3 and §61.242-9 do not apply to 40 CFR 61 Subpart L. With that being the case permit conditions 8.1.61. through 8.1.68. which contained requirements from 40 CFR §61.242-3 are not applicable to the facility and therefore have been removed. These conditions have been labeled as “Reserved.” Also, any reference to these conditions elsewhere in the permit has been removed.
 - Condition 8.3.7. The requirements of 40 CFR §§61.355(a)(5) and (6) have been added as requested.
 - Condition 8.3.8. Since MSC does not have a hazardous waste treatment, storage, or disposal facility and does not receive hazardous waste treatment, storage, or disposal from offsite, 40 CFR §61.355(b)(3) is not applicable to the facility. Therefore, as requested, 8.3.8.(3) has been removed.
 - Condition 8.4.7. The requirement from 40 CFR §61.246(d)(3) was previously omitted from the permit and therefore has been added as condition 8.4.7.(3) as requested. The existing conditions 8.4.7.(3) and 8.4.7.(4) have been renumbered as 8.4.7.(4) and 8.4.7.(5) respectively. Also the requirement from 40 CFR §61.242-11(e) for which 40 CFR §61.246(d)(3) refers was also previously omitted and therefore added in condition 8.1.98.
 - Condition 8.4.14. 8.4.14.(3) has been changed to 8.4.14.(5) as requested to match 40 CFR §61.356(b)
 - Condition 8.5.4. The permit condition numbers have been referenced for the alternative standard. The reference to “40 C.F.R. §§61.243-1 and 61.243-2” has been placed in brackets.
 - Section 9. The emergency air compressor and standby emergency generator were incorrectly identified in Equipment Table 1.1 (see response for Table 1.1 above). Consequently references to these two pieces of equipment were incorrect throughout Section 9.0 of the permit. Therefore, the affected requirements in this section have been corrected using the Emission Point IDs.
 - Condition 9.1.5. These requirements are generated through permit R13-2591 and not 40 CFR 63 Subpart ZZZZ. Therefore, the reference to 40 CFR §63.6675 in subsection (3), and “45CSR34, 40 CFR 63 Subpart ZZZZ” in the citation of authority have been removed.
 - Condition 9.1.6. This requirement was revised to match permit R13-2591D. The citation of authority has been revised to remove “45CSR§30-5.1.c.
 - APPENDIX A Revised “45 CSR 2A Section 3.1.b.” to “45 CSR 2 Section 8.4.c.” in Item “I” of Attachment I

Since “Stack No. 8” is not associated with the excess coke oven gas flare it has been removed from the Title of Attachment 3.

Revisions made to the Draft/Proposed permit as a result of EPA comments:

- Condition 4.1.5. The battery identifications “(Batteries 1, 2, 3, and 8)” have been added to this condition.
- Condition 4.1.11. The flare identifications “(P008-1, P008-2, P008-3 and P008-4)” have been added to this condition.
- Condition 4.1.35.1.(b)(3)(i) In response to providing the fan amps values, “[See “Note” in 4.1.35.8. for values]” has been added to this condition. Similarly, although no comment was made regarding the venturi scrubber pressure drop and water flow rate values, the same note has been added in Condition 4.1.35.1(b)(1).
- Condition 4.1.35.1.(b)(3)(ii) The capture system uses an electric motor to drive the fan. The facility opted to use the fan amps as allowed in 40 CFR §63.7290(b)(3)(i). Since the capture system uses an electric motor to drive the fan, 40 CFR §63.7290(b)(3)(ii) is not applicable and has been deleted from the permit.
- Condition 4.1.35.2.(a) The battery identifications “(Batteries 1, 2, 3, and 8)” have been added to this condition.
- Condition 4.1.35.2.(a)(2) Batteries 1 and 2 each have 47 ovens and battery #3 has 51 ovens. Since the combination of two or more batteries served by the same pushing equipment would equal more than 90 ovens, this requirement is not applicable and has been removed from the permit.
- Condition 4.1.35.4.(a)(1)(ii) The facility has the option to meet the requirements of this condition or that of 4.1.35.4.(a)(1)(i) [40 C.F.R. §63.7295(a)(1)(i)] for the concentration of total dissolved solids (TDS). The facility opts to meet the requirement of 4.1.35.4.(a)(1)(i). Additionally, Batteries 1, 2, and 3 are required to meet 40 C.F.R. §63.7295(a)(1)(i) through Permit R13-2772 §4.1.4.c. The following has been added to this requirement: (*Note: The facility opts to utilize the concentration of TDS above.*)
- Condition 4.1.35.8. In response to adding the values for site-specific operating limits for pressure drop and scrubber water flow rate in 4.1.35.8(a) and 4.1.35.8.(c), the following has been added at the end of 4.1.35.8. “*Note: Based on the test conducted December 2014: fan motor amperage is 158, pressure drop is 18 inches of water, and water flow is 837 gallons per minute.*” A note was part of the current active permit but was removed and placed in the fact sheet for the reasons described in Item 11 under the “Determinations and Justifications” section of the fact sheet. By reintroducing this note back into the permit, Item 11 is no longer valid.
- Condition 4.2.4.4.(b)(1) In response to adding the pressure drop and water flow rate values, “[See “Note” in 4.1.35.8. for values]” has been added to this condition.
- Condition 4.2.4.4.(d) In order to identify the compliance method used, the following has been added to this requirement: “(*Note: The facility has opted to meet the requirements of 40 CFR §63.7333(d)(2).*)”
- Condition 4.2.4.4.(g) The facility has opted to demonstrate compliance with 40 CFR §63.7295(a)(1)(i). The following has been added to this requirement: “(*Note: The facility opts to utilize the concentration of TDS above.*)”

- Condition 4.3.9.6.(a)(2) In response to adding the applicable operating limits and rates, “[*See Note in 4.1.35.8. for values*]” has been added to this condition.
- Condition 4.5.5.3.(b) “(*Batteries 1, 2, 3 and 8) (C01 and C02)*” have been added at the end of this condition.
- Condition 4.5.5.6.(c)(7)(i) “(*P001, P002, P003, P004*)” has been added to this condition.
- Condition 5.1.5.a. See Condition 5.1.6.below.
- Condition 5.1.6. In response to adding allowable emission rates for individual stacks, “(see condition 5.1.5.)” has been added to this condition. “(*Stack 11 = 16.2 lb/hr; Stack 12 = 7.07 lb/hr; E3 = 8.82 lb/hr; and E4 = 8.82 lb/hr*)” has been added to Condition 5.1.5.a.
- Condition 8.1.3. The LDAR program requirements are numerous and already in Section 8 of the permit. In response to adding them to this location, the following has been added to this condition: “[*Note – The LDAR program requirements are contained in 8.1.30.-8.1.46., 8.1.49.-8.1.108, 8.2.1.-8.2.3., 8.3.1-8.3.6., 8.4.1.-8.4.12., and 8.5.2.–8.5.9.*]”