



1851 Main Street, P.O. Box 670, Follansbee, WV 26037

3.2.2.2

December 14, 2015

Ms. Bev McKeone, Program Manager
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE,
Charleston, WV 25304

SUBJECT: Mountain State Carbon LLC - Follansbee, WV
Title V Operating Permit No.: R30-00900002-2010
Class II Administrative Update for Coal Tar Truck Loading Station

Dear Ms. McKeone:

Mountain State Carbon, LLC (MSC) operates a metallurgical coke manufacturing facility in Follansbee, West Virginia under the Title V operating permit number referenced above. As part of the operations, MSC produces coal tar which is sold to offsite customers. Coal tar is currently transferred to customers either via direct pipeline (to a neighboring facility) or loaded via rail tank cars or trucks and shipped to offsite customers.

The direct pipeline transfer of coal tar to the neighboring facility is unexpectedly being terminated, leaving the current coal tar loading station as the only mode of material transfer. Due to the continuous nature of production of coal tar in our manufacturing process, MSC requires a second option for coal tar transfer. For this reason, MSC is requesting to expedite the DAQ's authorization for the installation of a second method of coal tar transfer, particularly in the event of rail car transfer interference or unanticipated issues with the rail line.

Air quality source requirements for the current coal tar loading station (ID P021-22) are contained in Section 8 of MSC's Title V operating permit (excerpt included in this application package as Attachment G) and are described in detail in the associated Regulation 13 permit application (for R13-1652). Although the current permit allows for coal tar truck loading at this station, the available space and primary design configuration is to accommodate rail tank car loading. Therefore, MSC would like to install a second loading station specifically designed for coal tar truck loading and to provide an option of loading coal tar if the rail loading arm or rail service is interrupted. Also recognize that coal tar storage capacity at MSC is limited.

Ms. Beverly McKeone

December 14, 2015

Page Two

By way of the enclosed application package, MSC is requesting authorization for a Class II administrative update (Class II AA) in accordance with Regulation 13, §45-13-4.2.b. The Class II AA is to permit coal tar truck loading at another location within the plant premises. The new coal tar truck loading operation would be subject to the same Title V permit conditions than those associated with current operations. To help facilitate the DAQ's review and approval of the project, we are providing a Permit Determination form and are respectfully requesting an expedited review to help alleviate potential operational challenges that are looming with the loss of our ability for direct pipeline transfer.

Please find attached the Permit Determination form application containing:

- Permit Determination form application;
- Attachments A, B, and C - map, block flow diagram, and process description;
- Attachment F list of Regulation 13 permits (from the Title V renewal application);
and
- Attachment G – Title V excerpt of coal tar loading station.

MSC sincerely appreciates the DAQ's efforts in expediting this important application. If you have any questions, please don't hesitate to call me at 304-527-5676 or via email to Patrick.Smith@mscarbonllc.com.

Sincerely,



Patrick J. Smith
Environmental Manager

cc: Al Carducci/WVDEP-Wheeling
Eric Weisenborn/WVDEP-Wheeling
George Mesing, QSEM Solutions, Inc.



WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th 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): Mountain State Carbon, LLC		
2. NAME OF FACILITY (IF DIFFERENT FROM ABOVE): SAME		3. NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE: 324199
4A. MAILING ADDRESS: 1851 Main Street, Follansbee, WV 26037		4B. PHYSICAL ADDRESS: SAME
5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE MAP AS ATTACHMENT A): WV Route 2, along east bank of Ohio River, south of Weirton, and north of Wheeling WV.		
5B. NEAREST ROAD: WV Route 2	5C. NEAREST CITY OR TOWN: Follansbee	5D. COUNTY: Brooke
5E. UTM NORTHING (KM): 4465.76	5F. UTM EASTING (KM): 533.41	5G. UTM ZONE: 17
6A. INDIVIDUAL TO CONTACT IF MORE INFORMATION IS REQUIRED: Patrick Smith		6B. TITLE: Environmental Manager
6C. TELEPHONE: 304-527-5676	6D. FAX: 304-527-5646	6E. E-MAIL: Patrick.Smith@mscarbonllc.c
7A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY): 03-54-00900002		7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19 AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY): See Attachment F (from Title V renewal application)
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): <input type="checkbox"/> NEW SOURCE <input checked="" type="checkbox"/> ADMINISTRATIVE UPDATE <input type="checkbox"/> MODIFICATION <input type="checkbox"/> 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? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
9. IS DEMOLITION OR PHYSICAL RENOVATION AT AN EXISTING FACILITY INVOLVED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
10A. DATE OF ANTICIPATED INSTALLATION OR CHANGE: February/01/2016.		10B. DATE OF ANTICIPATED START-UP: February/01/2016.
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.		



13A. REGULATED AIR POLLUTANT EMISSIONS:

⇒ **FOR A NEW FACILITY**, PLEASE PROVIDE PLANT WIDE EMISSIONS BASED ON THE POTENTIAL TO EMIT (PTE) FOR THE FOLLOWING AIR POLLUTANTS INCLUDING ALL PROCESSES.

⇒ **FOR AN EXISTING FACILITY**, PLEASE PROVIDE THE PROPOSED CHANGE IN EMISSIONS BASED ON THE PTE OF ALL PROCESS CHANGES FOR THE FOLLOWING AIR POLLUTANTS.

PTE FOR A GIVEN POLLUTANT IS TYPICALLY BEFORE AIR POLLUTION CONTROL DEVICES AND IS COLLECTED BASED ON THE MAXIMUM DESIGN CAPACITY OF PROCESS EQUIPMENT.

POLLUTANT	HOURLY PTE (LB/HR)	YEARLY PTE (TON/YR) (HOURLY PTE MULTIPLIED BY 8760 HR/YR) DIVIDED BY 2000 LB/TON
PM	0.00	0.00
PM ₁₀	0.00	0.00
VOCs	No change	No change
CO	0.00	0.00
NO _x	0.00	0.00
SO ₂	0.00	0.00
Pb	0.00	0.00
HAPs (AGGREGATE AMOUNT)	No change	No change
TAPs (benzene)*	No change	No change
OTHER (INDIVIDUALLY)*	0.00	0.00

* ATTACH ADDITIONAL PAGES AS NEEDED

13B. PLEASE PROVIDE ALL SUPPORTING CALCULATIONS AS ATTACHMENT E.

CALCULATE AN HOURLY AND YEARLY PTE OF EACH PROCESS EMISSION POINT (SHOWN IN YOUR DETAILED PROCESS FLOW DIAGRAM) FOR ALL AIR POLLUTANTS LISTED ABOVE INCLUDING INDIVIDUAL HAP'S (LISTED IN SECTION 112[b] OF THE 1990 CAAA), TAP'S (LISTED IN 45CSR27), AND OTHER AIR POLLUTANTS (E.G. POLLUTANTS LISTED IN TABLE 45-13A OF 45CSR13, MINERAL ACIDS PER 45CSR7, ETC.).

14. CERTIFICATION OF DATA

I, Lawrence R Thomas (TYPE NAME) ATTEST THAT ALL THE REPRESENTATIONS CONTAINED IN THIS APPLICATION, OR APPENDED HERETO, ARE TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE BASED ON INFORMATION AND BELIEF AFTER REASONABLE INQUIRY, AND THAT I AM A **RESPONSIBLE OFFICIAL**** (PRESIDENT, VICE PRESIDENT, SECRETARY OR TREASURER, GENERAL PARTNER OR SOLE PROPRIETOR) OF THE APPLICANT.

SIGNATURE OF RESPONSIBLE OFFICIAL: _____

TITLE: VICE PRESIDENT & CHIEF FINANCIAL OFFICER

DATE: DECEMBER/14/ 2015

** THE DEFINITION OF THE PHRASE 'RESPONSIBLE OFFICIAL' CAN BE FOUND AT 45CSR13, SECTION 2.23.

NOTE: PLEASE CHECK ENCLOSED ATTACHMENTS:

ATTACHMENT A ATTACHMENT B ATTACHMENT C ATTACHMENT D ATTACHMENT E

RECORDS ON ALL CHANGES ARE REQUIRED TO BE KEPT AND MAINTAINED ON-SITE FOR TWO (2) YEARS.

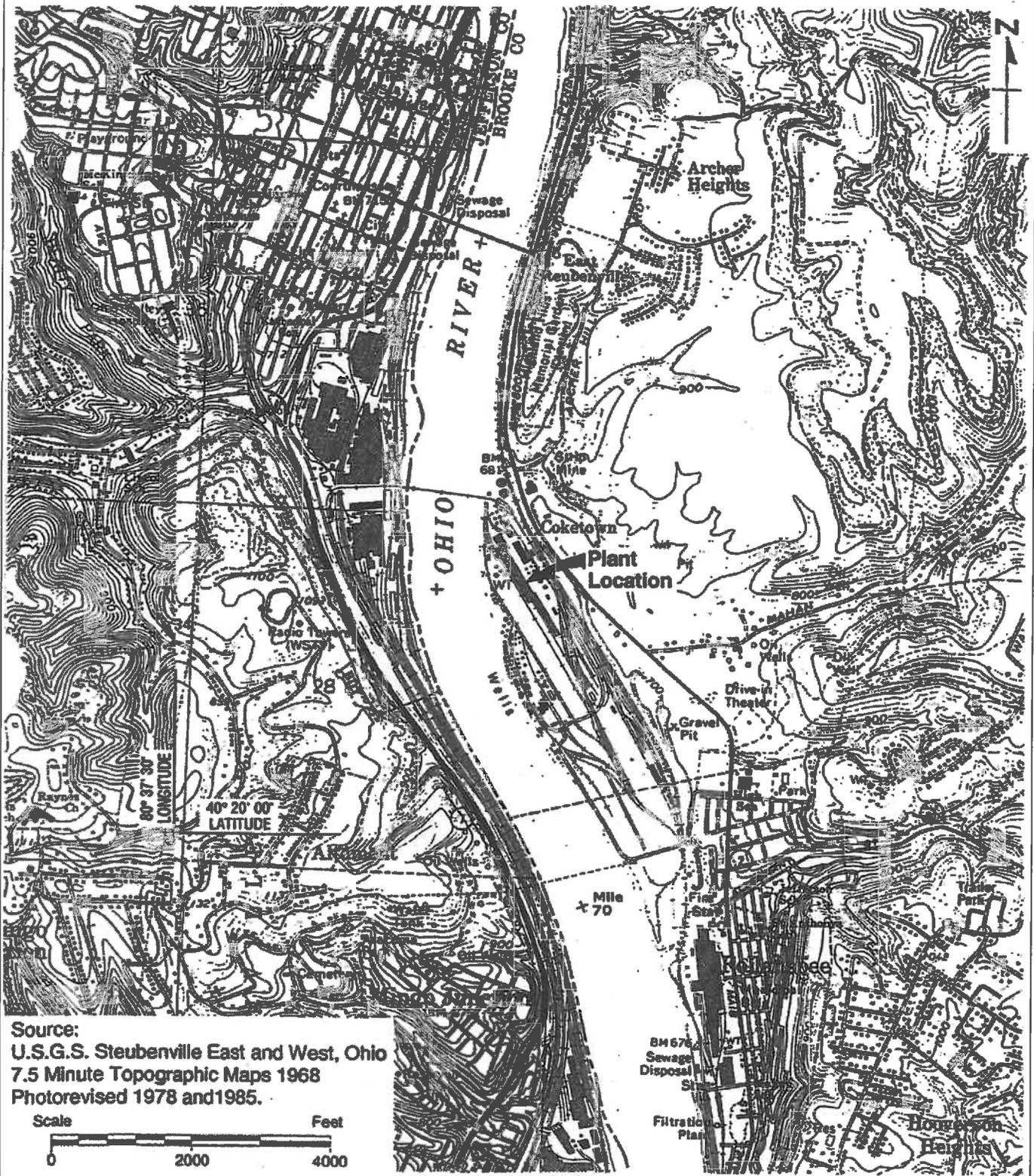
THE PERMIT DETERMINATION FORM WITH THE INSTRUCTIONS CAN BE FOUND ON DAQ'S PERMITTING SECTION WEB SITE:

www.dep.wv.gov/daq



Attachment A

**Permit Determination Form – Class II Administrative Update
Site Maps for Coal Tar Loading to Trucks
Mountain State Carbon, LLC
Follansbee, WV
December 2015**



Source:
 U.S.G.S. Steubenville East and West, Ohio
 7.5 Minute Topographic Maps 1968
 Photorevised 1978 and 1985.



Mountain State Carbon, LLC Follansbee, West Virginia			
TITLE		Attachment A: Topographic Map	
PREPARED BY		QSEM SOLUTIONS, INC.	
DATE		July 2014	
PROJECT	DRAWING	SHEET	REV
2041.012.00	Topo Map	1 of 1	001



**Proposed
Coal Tar
Truck Loading
Station**

**Current Coal Tar
Loading Area**

Main Office

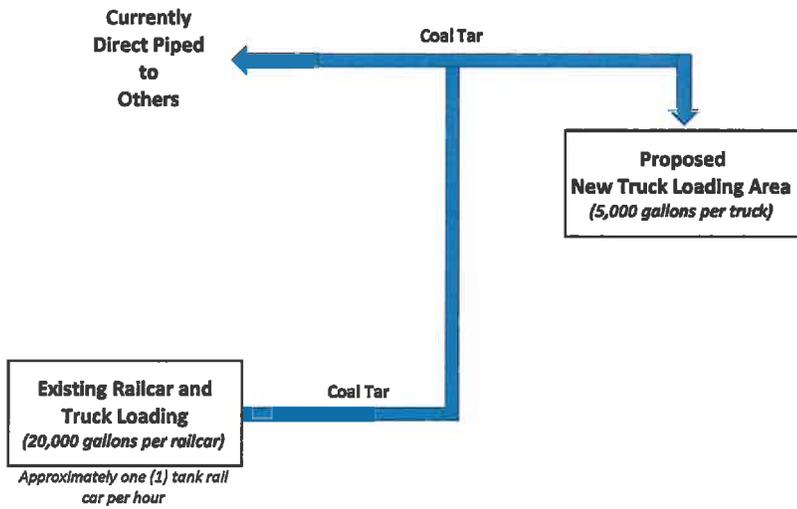
Old Block Barrones

Mountain State Carbon LLC Follansbee, West Virginia			
TYPE: Proposed New Coal Tar Truck Loading Attachment A1			
 PROVIDED BY OSDM SOLUTIONS, INC.			
DATE: December 2015			
PROJECT:	0810046	SHEET:	001
2014.09.09	Attachment for Truck Loading	1 of 1	001

Attachment B

**Permit Determination Form – Class II Administrative Update
Process Flow Diagram for Coal Tar Loading to Trucks
Mountain State Carbon, LLC
Follansbee, WV
December 2015**

MSC LLC Proposed New Coal Tar Truck Loading Attachment B1 - Permit Determination



Mountain State Carbon LLC Follansbee, West Virginia			
TITLE Proposed New Coal Tar Truck Loading			
PREPARED BY QSEM SOLUTIONS, INC.			
DATE December 2015			
PROJECT 2041.026.00	DRAWING B1 PFD New Coal Tar Truck Loading	SHEET 1 of 1	REV 001

Attachment C

**Permit Determination Form – Class II Administrative Update
Process Description for Coal Tar Loading to Trucks
Mountain State Carbon, LLC
Follansbee, WV
December 2015**

Attachment C

Permit Determination Form – Class II Administrative Amendment
Process Description for New Coal Tar Loading to Trucks
Mountain State Carbon, LLC
Follansbee, WV
December 2015

Mountain State Carbon, LLC (MSC) is requesting authorization from the West Virginia Department of Environmental Protection (WV DEP) Division of Air Quality (DAQ) to install a new coal tar truck loading station.

MSC produces coal tar from its metallurgical coke process at its facility in Follansbee, West Virginia. Coal tar is composite of organic compound which as a valuable commodity is sold as feed stock to customers for use or further processing. Coal tar is a heavy liquid, with a low vapor pressure. Currently MSC manages the transportation of the produced coal tar in two ways. One mechanism for transferring coal tar is via direct pipeline to a neighboring facility for sale or further processing by that company. The second method of transfer is that the coal is loaded into rail tank cars or trucks and sent to customers.

The current coal tar loading station is contained in the facility's Title V operating permit as ID P021-22, with Emission Point ID F34. The Construction permit for the system is R13-1652 and the application was submitted in January 1994. As indicated in R13-1652, MSC is permitted to use truck loading as well as rail car. MSC will continue to use the rail tank car loading station, but the two operations (existing rail tank car loading and new truck loading) will not be conducted simultaneously since they will use some of the same equipment (e.g., pump).

The proposed new coal tar truck loading facility would be located near the portion of the property adjacent to the neighboring facility where the coal is currently directly piped. The goal is to install a coal tar truck loading station. Similar to the existing rail tank car loading station, the truck loading station will not include air pollution controls since the vapor pressure of the coal tar is low and resulting emissions are very low.

The equipment for the new coal tar truck loading station will be similar to the existing coal tar loading station. The arm will swing into position over a truck, providing a splash fill. As show in Figure 1, the delivery fill pipe will enter the tank truck through a manway opening at the top. Similar to the existing coal tar loading station, the truck loading station will be paved and curbed to collect any dripped material.

CANOPY SYSTEMS //

Full height
loading rack



Attachment F

**Permit Determination Form – Class II Administrative Update
Existing Regulation 13 Permits
Mountain State Carbon, LLC
Follansbee, WV
December 2015**

Attachment F

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit (if any)
R13-2591A (WV)	05/11/2005	Construction permit issued
R13-2591 (WV)	02/15/2005	Construction permit issued
Permit to install 06-07507 (Ohio EPA)	01/06/2005	Annual COG consumption limitation & sulfuric acid production limitation
R30-00900002-2010	01/19/2010	Current Operating Permit
R13-1939A	08/23/2003	Construction permit issued
Civil Action No. 5:93CV195	01/30/1996	Federally Enforceable Only
R13-1652	09/02/1994	Construction permit issued
CO-SIP-91-29	11/14/1991	Consent Order
R13-0090	07/12/1974	Construction permit issued
R13-2591D	04/18/2014	Construction permit issued
R13-2632	09/28/2005	Construction permit issued
R13-2772	09/17/2008	Construction permit issued
R13-2798	07/13/2009	Construction permit issued
R13-1939B	09/23/2015	Construction permit issued
R13-2591E	09/22/2015	Construction permit issued
R13-2632A	09/22/2015	Construction permit issued
R13-2548B	09/22/2015	Construction permit issued
	/ /	
	/ /	
	/ /	
	/ /	

Attachment G

**Permit Determination Form – Class II Administrative Update
Excerpt from Title V Operating Permit for Coal Tar Loading
Mountain State Carbon, LLC
Follansbee, WV
December 2015**

8.0 Source-Specific Requirements [By-Product Plant, Coke Oven Gas Flare (Group 009) and emission point ID(s) (C06, F29, F30, P34, Stacks 14 and 15)]

8.1. Limitations and Standards

8.1.1. Emissions from the coal tar loading station (ID P021-22), Emission Point ID F34, shall not exceed the following:

Pollutant	lb/hr	ton/yr
Benzene	1.89	0.426
Toluene	0.42	0.094
Xylenes	0.09	0.022
Indene	0.07	0.017
Naphthalene	0.17	0.038
Styrene	0.04	0.010

[45CSR13, R13-1652, (A)1.]

8.1.2. Fill rate of rail tank cars shall not exceed 20,000 gallons per hour, 40,000 gallons per day, and 6 million gallons per year of coal tar.

[45CSR13, R13-1652, (A)2.]

8.1.3. The permittee shall continue the established leak detection and repair program per 40 C.F.R. Part 61 Subparts L and V. [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.].

[45CSR13, R13-1652, (A)3.]

8.1.4. The permitted facility must be constructed and operated in accordance with information filed in Permit Application No. 1652. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

[45CSR13, R13-1652, General Requirements, 3.]

8.1.5. Maximum emissions to the atmosphere from the Excess Coke Oven Gas (COG) Flare (Emission Unit P024-1) shall not exceed the following limits:

Pollutant	Hourly Emissions (lb/hr)	Maximum Hourly Emissions during the Desulfurization Outage (lb/hr)	Annual Emissions* (tpy)
Carbon Monoxide	62.2	62.2	273.3
Nitrogen Oxides	11.4	11.4	50.1
Particulate Matter	2.0	2.0	8.8
PM-10	2.0	2.0	8.8
Sulfur Dioxide	39.8	396*	294.0
Volatile Organic Compounds	23.5	23.5	103.0

* Annual Emission accounts for the desulfurization unit being down 672 hours per year for schedule maintenance and maximum hydrogen sulfide concentration of 479 grains per 100 cu. ft. of COG

[45CSR13, R13-1939, A.1., B.1.]