

Permit to Modify



R13-2274G

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:
Koppers, Inc.
Follansbee Tar Plant
009-00001

John A. Benedict
Director

Issued: DRAFT

This permit will supercede and replace Permit R13-2274G.

Facility Location: Follansbee, Brooke County, West Virginia

Mailing Address: P.O. Box 665
Follansbee, WV 26037

Facility Description: Tar Refining and Naphthalene Manufacturing

NAICS Codes: 325192

UTM Coordinates: 533.5 km Easting • 4,465.0 km Northing • Zone 17

Permit Type: Modification

Description of Change: This permitting action is for the replacement of Tube Heater #31 with a new unit that is capable of burning a dual fuel. In addition, this action has a fuel usage restriction that allows this modification to be synthetic minor modification to the non-attainment permitting rule (45CSR19).

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

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1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
992	992	Boiler 2	1941	50 MMBtu	None
993	993	Boiler 3	1988	75 MMBtu	None
995	995	Boiler 5	1977	132 MMBtu	None
881	881	Tube Heater 1		10 MMBtu	None
882	882	Tube Heater 2		10 MMBtu	None
884	884	Tube Heater 4		10 MMBtu	None
VT01	774a&b or 778	#1 Column		85 gpm tar	Flare or TO
VT02	779	#1 Pitch Flash Column			None
VT03	774a&b or 778	#2 Column		85 gpm tar	Flare or TO
VT04	774a&b or 778	#4 Column		100 gpm tar	Flare or TO
VT05	774a&b or 778	#4 Pitch Flash Column			Flare or TO
VT63	774a&b or 778	Decanter #63		12,900 gal	Flare or TO
VT64	774a&b or 778	Decanter #64		12,900 gal	Flare or TO
VT65	774a&b or 778	Decanter #65		12,900 gal	Flare or TO
VTMP	774a&b or 778	Melt Pot Tank		15,000 gal	Flare or TO
VTDB	774a&b or 778	Debenzolizer Unit	1998	100 gpm RCO	Flare or TO
VT32	774a&b or 778	Solvent Column #32			Flare or TO
VT31	None	Naphthalene Column #31			Vent to tank 3N
831	831	#31 Tube Heater (dual fuel)	2011	29 MMBtu	None
BW02	BW02	#2 Washer		12,000 gal	None
BW03	BW03	#3 Washer		12,000 gal	None
007	Fugitive	Entire Facility			None
008-01	773	Hot Oil Heater		5 MMBtu	None
008-02	771	Pencil Pitch Dryer		6MMBtu	Baghouse
R-1	Vehicle	Loading Rack			None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
R-2	Vehicle	Loading Rack			None
LR 1-1	Vehicle	Loading Rack			None
LR 1-2	Vehicle	Loading Rack			None
LR 1-3	Vehicle	Loading Rack			None
LR 1-4	Vehicle	Loading Rack			None
LR 1-5	Vehicle	Loading Rack			None
LR 2-1	Vehicle	Loading Rack			None
LR 2-2	774a&b or 778	Loading Rack			Flare or TO
LR 3-1	Vehicle	Loading Rack			None
LR 3-2	774a&b or 778	Loading Rack			Flare or TO
LR 4-1	774a&b or 778	Loading Rack			Flare or TO
LR 4-2	774a&b or 778	Loading Rack			Flare or TO
LR 4-3	Vehicle	Loading Rack			None
LR 4-4	Vehicle	Loading Rack			None
LR 4-5	777	Loading Rack			Scrubber E
LR 4-6	Vehicle	Loading Rack			None
LR 5-1	774a&b or 778	Loading Rack			Flare or TO
LR 5-2	774a&b or 778	Loading Rack			Flare or TO
LR 5-3	774a&b or 778	Loading Rack			Flare or TO
LR 5-4	777	Loading Rack			Scrubber E
LR 5-5	777	Loading Rack			Scrubber E
LR 5-6	Vehicle	Loading Rack			None
LR 5-7	Vehicle	Loading Rack			None
LR 5-8	Vehicle	Loading Rack			None
LR 5-9	Vehicle	Loading Rack			None
LR 5-10	Vehicle	Loading Rack			None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1	1	Tank	1945	440,638 gal	None
2	2	Tank	1945	440,638 gal	None
3	3	Tank	1926	514,077 gal	None
4	4	Tank	1945	514,077 gal	None
5	5	Tank	1945	514,077 gal	None
6	774a&b or 778	Tank	1951	518,484 gal	Flare or TO
7	774a&b or 778	Tank	1951	528,765 gal	Flare or TO
8	8	Tank	1951	528,765 gal	None
9	774a&b or 778	Tank	1994	514,077 gal	Flare or TO
10	774a&b or 778	Tank	1965	99,525 gal	Flare or TO
11	774a&b or 778	Tank	1965	99,525 gal	Flare or TO
13	774a&b or 778	Tank	1948	67,682 gal	Flare or TO
14	774a&b or 778	Tank	1948	56,853 gal	Flare or TO
15	15	Tank	2003	60,162 gal	None
16	16	Tank	1956	60,162 gal	None
17	774a&b or 778	Tank	1957	60,162 gal	Flare or TO
18	18	Tank	1957	60,162 gal	None
20	20	Tank	1951	37,902 gal	None
21	21	Tank	1936	94,003 gal	None
23	23	Tank	1936	94,003 gal	None
24	24	Tank	1959	58,752 gal	None
25	25	Tank	1959	58,752 gal	None
28	28	Tank	1941	58,572 gal	None
30	774a&b or 778	Tank	1965	210,566 gal	Flare or TO
33	33	Tank	1940	15,546 gal	None
40	774a&b or 778	Tank	1926	251,898 gal	Flare or TO

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
41	774a&b or 778	Tank	1926	251,898 gal	Flare or TO
42	42	Tank	1937	251,898 gal	None
48	774a&b or 778	Tank	1995	514,077 gal	Flare or TO
49	774a&b or 778	Tank	1995	514,077 gal	Flare or TO
50	774a&b or 778	Tank	2007	1,065,991 gal	Flare or TO
51	51	Tank	1928	1,065,991 gal	None
52	52	Tank	1928	1,065,991 gal	None
53	53	Tank	1948	1,062,945 gal	None
54	54	Tank	1963	514,007 gal	None
55	774a&b or 778	Tank	1969	913,707 gal	Flare or TO
56	774a&b or 778	Tank	1969	913,707 gal	Flare or TO
57	57	Tank	1969	440,638 gal	None
58	774a&b or 778	Tank	1973	435,280 gal	Flare or TO
59	59	Tank	1975	514,077 gal	None
70	70	Tank	1956	9,649 gal	None
71	71	Tank	1956	9,649 gal	None
72	72	Tank	1956	9,649 gal	None
73	73	Tank	1956	9,649 gal	None
82	774a&b or 778	Tank	1966	148,116 gal	Flare or TO
83	774a&b or 778	Tank	1966	105,797 gal	Flare or TO
84	84	Tank	1937	105,797 gal	None
85	85	Tank	1937	105,797 gal	None
87	87	Tank	1947	105,444 gal	None
88	88	Tank	1937	105,797 gal	None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
89	774a&b or 778	Tank	1941	105,797 gal	Flare or TO
100	100	Tank	1987	17,872 gal	None
126	774a&b or 778	Tank	1970	60,162 gal	Flare or TO
127	774a&b or 778	Tank	1970	60,162 gal	Flare or TO
151	151	Tank	1965	110,159 gal	None
152	152	Tank	1965	158,630 gal	None
153	153	Tank	1977	11,750 gal	None
251	774a&b or 778	Tank	1957	19,976 gal	Flare or TO
252	774a&b or 778	Tank	1957	19,976 gal	Flare or TO
253	774a&b or 778	Tank	1957	19,976 gal	Flare or TO
254	774a&b or 778	Tank	1957	19,976 gal	Flare or TO
300	300	Tank	1951	5,339 gal	None
301	301	Tank	1944	5,269 gal	None
302	302	Tank	1940	5,239 gal	None
303	303	Tank	1944	5,269 gal	None
304	304	Tank	1944	5,269 gal	None
305	305	Tank	1944	5,269 gal	None
308	308	Tank	1965	13,891 gal	None
323	323	Tank	1940	9,998 gal	None
337	337	Tank	1967	19,976 gal	None
351	351	Tank	1945	16, 193 gal	None
352	352	Tank	1945	16,143 gal	None
360	360	Tank	1945	25,910 gal	None
361	361	Tank	1945	25,910 gal	None
362	362	Tank	1945	25,910 gal	None
363	363	Tank	1945	25,910 gal	None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
364	364	Tank	1945	25,910 gal	None
377	377	Tank	1955	13,452 gal	None
378	378	Tank	1955	13,452 gal	None
381	381	Tank	1942	105,797 gal	None
382	774a&b or 778	Tank	1952	251,898 gal	Flare or TO
383	383	Tank	1959	21,151 gal	None
406	774a&b or 778	Tank	1951	22,843 gal	Flare or TO
407	774a&b or 778	Tank	1951	22,843 gal	Flare or TO
408	408	Tank	1951	22,843 gal	None
501	501	Tank	1972	499,683 gal	None
502	502	Tank	1972	499,683 gal	None
560	560	Tank	1953	25,592 gal	None
561	561	Tank	1953	25,592 gal	None
580	580	Tank	1953	110,159 gal	None
623	774a&b or 778	Tank	1965	456,254 gal	Flare or TO
801	777	Tank	1963	63,546 gal	Scrubber E
802	777	Tank	1963	63,546 gal	Scrubber E
803	803	Tank	1963	11,311 gal	None
804	777	Tank	1966	63,546 gal	Scrubber E
805	777	Tank	1967	34,264 gal	Scrubber E
806	777	Tank	1975	63,546 gal	Scrubber E
808	777	Tank	2008	237,944 gal	Scrubber E
1M	1M	Tank	Pre 1970	25,910 gal	None
2N	774a&b or 778	Tank	Pre 1970	25,910 gal	Flare or TO
3N	774a&b or 778	Tank	Pre 1970	25,564 gal	Flare or TO
4N	4N	Tank	Pre 1970	25,910 gal	None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
5N	5N	Tank	Pre 1970	25,910 gal	None
6R	6R	Tank	Pre 1970	25,910 gal	None
API	Aeration Basin	API Separator		180,274 gpm proc. water	Biological Treat.
DAF	Aeration Basin	Dissolved Air Flotation Separator		180,274 gpm proc. water	Biological Treat.
Aer. Tank	Fugitive	Aeration Basin		1,000,000 gal	None
Clarifier	Fugitive	Primary Clarifier		360,000 gal	None
510	Aeration Basin	Tank			Biological Treat.
511	Aeration Basin	Tank			Biological Treat.
540	540	Tank	1953	259,095 gal	Biological Treat.
541	541	Tank	1953	259,095 gal	Biological Treat.
Z01-1	Tankcar Vent	CCOT Tankcar Heating			None
Z01-1	Barge Vent	CCOT Barge Heating			None
Z01-2	Barge Vent	RCO Barge Heating			None
Z01-3	774a&b or 778	RCO Tankcar Heating			Flare or TO
00E	Fugitive	Tankcar Cleaning Station		48 cars/yr	None
221	774a&b or 778	Tank	1956	54,146	Flare or TO
222	774a&b or 778	Tank	1956	54,146	Flare or TO
223	774a&b or 778	Tank	1956	54,146	Flare or TO
224	774a&b or 778	Tank	1956	54,146	Flare or TO
Z03	Fugitive	Slop Conveyor	2007		None
Z04	Fugitive	Paved Roadway			None

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{2.5}	Particulate Matter less than 2.5 μm in diameter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10μm in diameter
CO	Carbon Monoxide	Ppb	Pounds per Batch
C.S.R. or CSR	Codes of State Rules	Pph	Pounds per Hour
DAQ	Division of Air Quality	Ppm	Parts per Million
DEP	Department of Environmental Protection	Ppm_v or ppmv	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	Psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
M	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or MMBtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*
- 2.3.2. 45CSR14 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration;*
- 2.3.3. 45CSR19 – *Requirements for Pre-Construction Review, Determination of Emission Offsets for Proposed New or Modified Stationary Sources of Air Pollution and Emission Trading for Intrasource Pollutants.*

2.4. Term and Renewal

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-2274F. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2274, R13-2274A, R13-2274B, R13-2274C, R13-2274D, R13-2274E, R13-2274F, R13-2274G, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and -10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along

with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate

corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language;
 2. The result of the test for each permit or rule condition; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support

information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. State Enforceable Only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Enforcement and Permits Review
(3AP12)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

- 4.1.1. The following source must be controlled by either the Thermal Oxidizer or by Flare at all times: #1 Column, #2 Column, #4 Column, #4 Pitch Flash Column, Decanter 63, 64 and 65, Melt Pot, Debezolizer unit, #32 Solvent Column, Creosote/Petroleum Creosote Solution Blending Tanks 221, 222, 223, 224 and the RCO Tankcar Heating.
- 4.1.2. Emissions from the flares/Thermal Oxidizer (including SO₂ from Naphthalene and tar distillation) combined shall not exceed the following:

Table #4.1.2. Emission Limits for flares/thermal oxidizer											
PM		NO _x		SO ₂		CO		VOCs		Total HAPs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
0.28	1.25	4.85	21.29	52.3	229.3	5.72	25.11	9.93	8.32	7.42	6.17

- 4.1.3. Emissions of Benzene from the TO and flares combined shall not exceed 2.47 pounds per hour nor 1.95 tons per year.
- 4.1.4. Emissions of Naphthalene from the TO and flares combined shall not exceed 2.19 pounds per hour nor 2.45 tons per year.
- 4.1.5. The following storage tanks and loading racks must be controlled by Scrubber E: Tanks 801, 802, 804, 805, 806, and 808, Loading Racks LR 4-5, LR 5-4, and LR 5-5.
- 4.1.6. Emissions from Scrubber E shall not exceed the following:

Table 4.1.6. Emission Limits for Scrubber E			
VOCs		Total HAPs	
lb/hr	tpy	lb/hr	tpy
5.82	4.46	4.99	3.80

- 4.1.7. The annual throughput of benzene to Tank 11 shall not exceed 980,000 gallons per year.
- 4.1.8. The maximum quantity of crude coke oven tar (CCOT) loaded on the barges shall not exceed 3,125,000 gallons per year and the average fill rate shall not exceed 700 gallons per minute. The barges must be loaded by submerged fill.
- 4.1.9. The permittee shall not load barges and tank trucks/railcars simultaneously.
- 4.1.10. Maximum liquid throughput to the 15,000 gallon horizontal melt pot shall not exceed 1,000,000 gal/year and maximum solid throughput to the 15,000 gallon horizontal melt pot shall not exceed 5,000 tons per year.
- 4.1.11. The hatch of the 15,000 gallon horizontal melt pot must be kept in the closed position at all times except during the introduction of solid materials through the hatch.

- 4.1.12. The following materials must be stored or blended in tanks controlled by the thermal oxidizer or flares: Crude tar, crude/petro tar blend, petro tar, RCO, crude and petro distillate off of the columns, PSB, modified PSB, refined tar, benzene free tar, liquid fuel, naphthalene, creosote or petroleum creosote solution, correction oil.
 - 4.1.12.1. Pitch, either off the still or blended, must be stored in tanks controlled by Scrubber E.
- 4.1.13. The following materials must be loaded from loading racks controlled by the thermal oxidizers or flares: Petro tar, PSB, MPSB, refined tar, naphthalene, and creosote.
 - 4.1.13.1. Pitch, either off the still or blended, must be loaded from loading racks controlled by Scrubber E.
- 4.1.14. Crude tar loading to trucks or railcars shall be loaded via submerge fill.
- 4.1.15. The API Separator, DAF Separator, Tanks 510, 511, 540, and 541 shall be enclosed and the off-gases directed to the Aeration Basin at the wastewater treatment plant.
- 4.1.16. The API Separator, DAF Separator, Tanks 510, 511, 540, and 541 shall be enclosed and the off-gases directed to the Aeration Basin at the wastewater treatment plant.
 - 4.1.16.1. The combustion temperature must not be lower than 1,400F as a 24 hour average.
- 4.1.17. The flares must be operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- 4.1.18. Annual emissions from the entire facility shall not exceed the following:

Table 4.1.18. Facility Wide Annual Limits				
VOCs	Benzene	Naphthalene	Total POM	Total HAPs
44 tpy	3.4 tpy	6.0 tpy	9.9 tpy	24.2 tpy

- 4.1.19. The facility is subject to 40 CFR 63 Subparts F, G and H. The permittee will implement a LDAR monitoring plan for all equipment associated with sources subject to these rules consistent with the rules.
- 4.1.20. The facility is subject to 40 CFR 61 Subpart J. However, any sources subject to the equipment leak standards of this rule must follow the equipment leak requirements of 40 CFR 63 Subpart H.
- 4.1.21. The facility is subject to 40 CFR 63 Subpart MMM. The permittee will implement a LDAR monitoring plan for all equipment associated with sources subject to this rule consistent with the rule.
- 4.1.22. For all equipment not otherwise subject to the LDAR programs of 40 CFR Part 63, Subparts H and MMM, a plant wide leak detection and repair program shall be implemented.
 - 4.1.22.1. An initial LDAR event identifying all components shall be conducted, where the components are identified and instrumentally monitored for leaks. Components include pumps, agitators, valves, connectors, pressure relief devices, open-ended lines or valves, instrumentation systems and closed vent systems.

- 4.1.22.2. An initial repair attempt of any leaking equipment must be made within 5 days of finding the leak.
- 4.1.22.3. A leak will be defined as an instrument reading of the following concentrations:
 - 4.1.22.3.1. 10,000 ppm for agitators
 - 4.1.22.3.2. 2,000 ppm for pumps
 - 4.1.22.3.3. 500 ppm for valves, connectors, pressure relief devices, instrumentation systems and close vent systems.
- 4.1.22.4. Subsequent monitoring shall be conducted at the following frequency:
 - 4.1.22.4.1. After the initial event, monitoring shall be conducted every year for a period of 3-years, where 1/3 of the plant is monitored each year.
 - 4.1.22.4.2. At the end of the 3 year period, the percent leaking equipment (PLE) is to be calculated.
 - 4.1.22.4.2.1. If the PLE is less than 2%, components shall be monitored once every 5-years.
 - 4.1.22.4.2.2. If the PLE is greater than or equal to 2%, monitoring will continue on the same frequency (1/3 of the plant every year for 3-years). After that 3-year period the PLE shall be calculated again to determine if the monitoring frequency can be decreased to once every 5 years.
- 4.1.22.5. Open-ended lines and valves shall be equipped with a cap, blind flange, plug or a second valve.
- 4.1.23. The outlet temperature of Scrubber E shall not exceed 130F. If during the course of monitoring the temperature in accordance with condition 4.2.6. of this permit, the temperature exceeds 130F the permittee will perform testing as outlined in condition 4.3.3. of this permit.
- 4.1.24. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. To determine compliance with section 4.1 of this permit the permittee shall keep the following records on a monthly basis at the facility:
 - 4.2.1.1. Throughput of benzene in storage tank 11
 - 4.2.1.2. Total hours of operation of the barge, tank truck and rail car loading system when loading (CCOT) crude coke oven tar.

- 4.2.1.3. Total gallons of CCOT loaded by the barge, tank truck and rail car loading facility.
- 4.2.1.4. Average feed rate of RCO to the Distillation Column VT100.
- 4.2.1.5. Monthly records of the total liquid and solid throughput to the 15,000 gallon horizontal melt pot.
- 4.2.2. The permittee shall perform monthly visible emission observations for the following emission points: Stacks 771, 778, 774a, 774b, and 777.
 - 4.2.2.1. The monthly visible emission observations shall consist of Method 22 like visible emissions checks. The checks shall be performed during periods of normal operation and appropriate weather conditions, and for a sufficient time interval, but no less than one minute, to determine if any visible emissions are present. If visible emissions are observed, the permittee shall conduct an opacity evaluation in accordance with Method 9 of 40 CFR 60, Appendix A within 24 hours unless the visible emissions are corrected beforehand.
- 4.2.3. Monitoring of the Thermal Oxidizer
 - 4.2.3.1. Combustion temperature of the thermal oxidizer shall be monitored continuously at the firebox or ductwork immediately downstream of the firebox.
 - 4.2.3.2. The temperature shall be recorded at least once every 15-minutes using a data acquisition system.
 - 4.2.3.3. A daily 24-hour average temperature shall be calculated.
- 4.2.4. Monitoring of Flares
 - 4.2.4.1. For each flare, the presence of a pilot or flare flame shall be monitored continuously using a thermocouple, ultraviolet beam sensor or infrared sensor.
 - 4.2.4.2. Monitoring data shall be recorded at least once every hour in indicate whether the monitor is continuously operating and whether a flame is present.
 - 4.2.4.3. Flow of the natural gas and waste gas to the Main Flare will be continuously measured using inline flow meters and automatically recorded every hour. The pitot tube measuring the flow of waste gas shall be checked periodically for pluggage. Initially the pitot tube shall be checked quarterly. If no pluggage is observed during the first four quarterly checks the frequency may be reduced to semi-annually. If no pluggage is observed during the first two semi-annual checks, the frequency may be reduced to yearly. If any subsequent annual inspection shows pluggage, the inspection schedule shall reset to quarterly checks until four consecutive quarterly checks show no pluggage.
 - 4.2.4.4. Flow of natural gas to the flare will be metered using a Coriolis mass flow meter.
 - 4.2.4.5. The flow meter will be calibrated in accordance with manufacturer's instruction and frequencies but at a minimum annually.
- 4.2.5. The permittee shall monitor the applicable equipment of condition 4.1.26. of this permit in accordance with Method 21 located in 40 CFR Part 60, Appendix A.
- 4.2.6. Once per month the permittee measure and record the outlet gas temperature of Scrubber E. The temperature shall be measured at the scrubber stack testing port.

4.3. Testing Requirements

- 4.3.1. If the outlet temperature of Scrubber E, exceeds the limit of section 4.1.30 of this permit, the permittee shall perform a stack test using an appropriate EPA approved method in order to determine compliance with condition 4.1.6 of this permit. Said testing shall be performed within 60 days of the date it is determined that the outlet temperature from Scrubber E exceeded the maximum required by section 4.1.30 of this permit.

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

- 4.4.4. Records of the visible emissions observations shall be maintained. The records shall include, at a

minimum, the date, time, name of emission unit, the applicable visible emissions requirement, the result of the observation, the name of the observer, any maintenance or corrective actions taken as a result of the observations.

- 4.4.5. The permittee shall calculate actual emission from the plant (including fugitive emissions) on a monthly basis and calculate annual emissions on a 12-month rolling total. Actual emissions shall be calculated using recordkeeping data, test results, AP-42 emission factors or other engineering methods.
 - 4.4.5.1. Fuel consumption of the boilers and process heaters.
 - 4.4.5.2. Operating hours of the boilers and process heaters.
 - 4.4.5.3. Content and throughput for the tanks.
 - 4.4.5.4. Quantity of material loaded at the loading racks.
 - 4.4.5.5. Melt pot throughput.
 - 4.4.5.6. Quantity of material unloaded from incoming vehicles requiring heat up.
 - 4.4.5.7. Quantity of tankcars cleaned.
 - 4.4.5.8. Slop throughput to slop conveyor.
- 4.4.6. In order to determine compliance with condition 4.1.26. of this permit, the permittee shall keep the following records:
 - 4.4.6.1. Date and results of the initial monitoring event.
 - 4.4.6.2. List of leaking equipment, repair dates, and corrective actions.
 - 4.4.6.3. Data and results of all subsequent monitoring.
 - 4.4.6.4. Results of PLE calculations.
- 4.4.7. In order to determine compliance with conditions 4.1.30. and 4.2.7. of this permit, the permittee shall keep records of the outlet gas temperature of Scrubber E.

4.5. Reporting Requirements

- 4.5.1. Upon request of the Director or his authorized representative, the permittee shall provide copies of any records/calculations required by this permit.

5.0. Specific Requirements for Indirect Heat Exchangers (Boilers and Process Heaters)

5.1. Limitations and Standards

5.1.1 Emissions from the combined boilers shall not exceed the following:

Table 5.1.1. Emissions Limits for Boilers # 2, 3, and 5											
PM		NO _x		SO ₂		CO		VOCs		Total HAPs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
11.93	38.24	73.8	246.4	35.89	109.4	19.2	84.15	1.24	5.43	0.52	2.09

5.1.2. Maximum fuel consumption rate of Boiler #3 shall not exceed the rate represented in the following formula:

$$123 * y + 63 * x = 148,500$$

Where: y = Annual natural gas consumption (MMcf/yr)
 x = Annual liquid fuel consumption (Mgal/yr)
 148,500 = Maximum NO_x emission (lb/yr)

The annual throughput of natural gas to Boiler #3, shall not exceed 657 MMcf/yr. The annual throughput of "liquid fuel" to Boiler #3, shall not exceed 2,357,143 gal/yr. Compliance with the natural gas and "liquid fuel" throughput limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the throughput at any given time for the previous twelve (12) consecutive months.

5.1.3. Emissions of hexane from the combined boilers shall not exceed 0.38 pounds per hour nor 1.64 tons per year.

5.1.4. Boiler #5 shall fire only natural gas or fuel oil with a sulfur content of 1% or less.

5.1.5. Emissions from the 3 tube heaters (#1, , the pencil pitch hot oil heater and the pencil pitch dryer combined, shall not exceed the following:

Table 5.1.5. Emission Limits for Tube Heaters, Pencil Pitch Dryer and Hot Oil Heater											
PM		NO _x		SO ₂		CO		VOCs		Total HAPs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
0.31	1.36	4.1	18.0	0.03	0.11	3.4	15.08	0.23	0.99	0.08	0.34

5.1.6. Total Particulate Matter Emissions from the pencil pitch dryer shall not exceed 1.86 pounds per hour. Total PM₁₀ emissions from the pencil pitch dryer shall not exceed 0.59 pounds per hour.

5.1.7. The company shall install operate and maintain a fabric filter baghouse designed to insure, at minimum, the necessary collection and control efficiencies required to achieve and maintain compliance with the total PM and PM₁₀ emissions of section 4.1.23. of this permit and the visible emission standards of 45CSR7.

5.1.8. The installation, operation, and maintenance of the Tube Heater #31 identified as emission point 831 shall be conducted in accordance with the following limitations:

- a. Hourly and annual emission limitation from the tube heater shall not exceed the following:

Table 5.1.6.a. Emission Limits for Tube Heater #31						
	PM/PM₁₀/PM_{2.5}¹	SO₂	NO_x	CO	VOCs	Total HAPs
Hourly	2.42	6.98	11.99	1.84	2.76	0.05
Annual	8.0*	22.7	39.5*	6.4	9.1	0.24

* These annual limits for the tube heater limit the annual potential below trigger level threshold values under 45 CSR 14 and 45 CSR 19. The liquid fuel limit in item c. is established to limit these annual emissions below major modification trigger levels.

¹ PM/PM₁₀/PM_{2.5} limits includes the filterable and condensable fractions.

- b. The permittee is limited to only combusting natural gas, liquid fuel, or any combination of these two fuels up to maximum heat input of 29.01 MMBTU/hr in the tube heater. The liquid fuel combusted in the tube heater shall not have sulfur content of greater than 0.2 % by weight.
- c. Annual operating limitation for the tube heater shall be restricted to either one of the following annual limitations, which corresponds to the annual emission limits of item a:
- i. The tube heater shall be limited to combusting no more than 1,311,840 gallons of liquid fuel and 74.41 MMcf in any consecutive 12 month period; or
 - ii. The tube heater shall be limited to combusting no more than 1,395,515 gallons of liquid fuel and no other fuel combusted during any consecutive 12 month period.
- d. The maximum amount of liquid fuel the tube the tube heater shall combust is 212 gallons per hour.
- e. Visible emissions from the tube heater (Emission Point 831) shall not exceed 10% opacity.
[45CSR§2-3.1]

5.1.9. The term “liquid fuel” as used in this section shall be defined as follows:

- a. Debenzolizer overheads, which is benzene-rich light oil that is removed from refined chemical oil by the Debenzolizer. This product is pumped from solvent storage to Tank 11 as it is produced.
- b. Unwashed solvent, which is the overhead cut from the solvent distillation column in the Naphthalene Distillation Unit (NDU).

5.1.10. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

5.2. Monitoring Requirements

5.2.1. Fuel type and fuel usage for Boilers #3 and #5.

- 5.2.2. Monthly fuel usage by fuel type for Tube Heater #31. In addition, the permittee shall keep a 12-month rolling total of liquid fuel consumed by the tube heater each month. Such records shall be maintained in accordance with Condition 3.4.1.

[45 CSR §2-7.1.a.6., 40 CFR §60.48c(g)(2)]

- 5.2.2. The permittee shall perform monthly visible emission observations for the following emission point: Stack 993 and 831. Visible emission observation for Stack 831 is not required if Tube Heater #31 is operating more than 50% of actual operating hours on natural gas during the calendar month.

The monthly visible emission observations shall consist of Method 22 like visible emissions checks. The checks shall be performed during periods of normal operation and appropriate weather conditions, and for a sufficient time interval, but no less than one minute, to determine if any visible emissions are present. If visible emissions are observed, the permittee shall conduct an opacity evaluation in accordance with Method 9 of 40 CFR 60, Appendix A within 24 hours unless the visible emissions are corrected beforehand

- 5.2.3. Once every quarter, the permittee shall sample the liquid fuel as to be combusted and analyze the following:

Ash (percent by weight)

Moisture (percent by weight)

Total sulfur (percent by weight)

Nitrogen (percent by weight)

Higher Heating Value (HHV), in terms of Btu/gallon

Such analysis will be conducted by a certified independent laboratory using appropriate reference methods. Such records shall include the data and location sample(s) taken, chain of custody documents, and analytic report of the analysis. These records shall be maintained in accordance with Condition 3.4.1. of this permit.

- 5.2.4. For the purposes of determine the actual ratio the gas volumes of combustion to the heat content of liquid fuel (F-factor for the liquid fuel); the permittee shall sample the liquid fuel in accordance with U.S. EPA Method 19 and analyze in accordance in accordance with the appreciated ASTM reference methods. The permittee shall use the appropriate equation of Method 19 and the analytical data of the liquid fuel to determine the F-factor for the liquid fuel. This determination shall be conducted once per calendar year or until the Director is satisfied that the permittee has determine the average F-factor for the liquid fuel. Records of such determinations to include analytic data and reference method shall be recorded and maintained in accordance with Condition 3.4.1 of this permit.

5.3. Testing Requirements

- 5.3.1. The permittee shall conduct performance testing to demonstrate compliance with the NO_x and CO hourly emission limits of Condition 5.1.8. if one of the following conditions are met:
- The amount of liquid fuel consumed by Tube Heater #31 in a 12 month per exceeds 1,069,350 gallons;
 - Nitrogen on content of the liquid fuel is greater than 0.53% by weight determinate during the quarterly analysis; or
 - The actual F-factor of the liquid fuel is determine to be 9190 dscf/MMBtu or greater.

Within 180 days after the one of the above mentioned conditions is met, the permittee shall measure amount of NO_x and CO is emitted from the tube heat in accordance with U.S. EPA Methods 7E (NO_x) and 10 (CO) and any other method cited or reference in these two methods. Such testing shall be conditioned in accordance with Condition 3.3.1. Such records shall be maintained in accordance with Condition 3.4.1. During such testing, the tube heater shall be operated within 90% of the maximum design heat input combusting 100% liquid fuel. Once compliance is demonstrated, then no further testing of the tube heater is required under this permit.

5.4. Recordkeeping Requirements

- 5.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 5.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 5.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.
- For each such case associated with an equipment malfunction, the additional information shall also be recorded:
- e. The cause of the malfunction.
 - f. Steps taken to correct the malfunction.

- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

5.5. Reporting Requirements

- 5.5.1 The permit shall notification the Director and/or Administrator the initial startup of the replacement Tube Heater #31. Such written notification shall be postmarked within 15 days after such date.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.