West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Modify

R13-0462A

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:

Petroleum Fuel & Terminal Company
Weirton Terminal
009-00018

John A. Benedict
Director

Issued: DRAFT

This permit will supercede and replace Permit R13-0462.

Facility Location:	3048 Birch Drive Weirton, Brooke County, West Virginia
Mailing Address:	2801 Rock Road Granite City, IL 62040
Facility Description:	Bulk Petroleum Terminal (not including gasoline)
NAICS Codes:	424710
UTM Coordinates:	531.6 km Easting • 4,471.0 km Northing • Zone 17T
Permit Type:	Modification
Description of Change:	To allow for the offloading & loading of crude oil, natural gas condensate (NGC), vacuum gas oil (VGO) to include the storage of such products.

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.

As a result of this permit, the source is a non-major or area source subject to 45CSR30. Therefore, the facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EU-1	EP-1	Tank 225-1	1978	9,259,782 gal	IFR
EU-2	EP-2	Tank 150-2	1978	6,226,878 gal	IFR
EU-3	EP-3	Tank 150-3	1978	6,226,878 gal	IFR
EU-4	EP-4	Tank 100-4	1978	3,926,034 gal	IFR
EU-5	EP-5	Tank 54-5	1978	2,141,538 gal	IFR
EU-6	EP-6/EP-11	Barge Dock (Two Barge Berths)	1978		None/CD-1
EU-7	EP-7	Support Tank (Fuel Oil Tank for Steam Boiler)	1978	12,000 gal	None
EU-8	EP-8	Hot Oil Heater #1 (Natural Gas Fired)	1978	8.4 MMBtu/hr	None
EU-9	EP-9	Hot Oil Heater #2 (Natural Gas Fired)	1978	8.4 MMBtu/hr	None
EU-10	EP-10	Steam Boiler #1 (Fuel Oil Fired)	1978	25.1 MMBtu/hr	None
CD-1	EP-11	Vapor Combustion Unit (VCU)	2012		N/A
SEP-1	Ep-12	Oil/Water Separator	1978		

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		
CO	Carbon Monoxide	**PM_{10}**	Particulate Matter less than 10µm in diameter
C.S.R. *or* CSR	Codes of State Rules		
DAQ	Division of Air Quality	**Ppb**	Pounds per Batch
DEP	Department of Environmental Protection	**Pph**	Pounds per Hour
		Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	**Ppm_V or ppmv**	Parts per Million by Volume
FOIA	Freedom of Information Act		
HAP	Hazardous Air Pollutant	**PSD**	Prevention of Significant Deterioration
HON	Hazardous Organic NESHAP		
HP	Horsepower	**Psi**	Pounds per Square Inch
lbs/hr	Pounds per Hour	**SIC**	Standard Industrial Classification
LDAR	Leak Detection and Repair		
M	Thousand	**SIP**	State Implementation Plan
MACT	Maximum Achievable Control Technology	**SO_2**	Sulfur Dioxide
		TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	**TPY**	Tons per Year
MM	Million	**TRS**	Total Reduced Sulfur
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**TSP**	Total Suspended Particulate
		USEPA	United States Environmental Protection Agency
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour		
		UTM	Universal Transverse Mercator
NA	Not Applicable	**VEE**	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	**VOC**	Volatile Organic Compounds
		VOL	Volatile Organic Liquids
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. 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 R13-0462. 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 R13-0462, R13-0462A, 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.]

3.1.7. Notwithstanding the specific emission limits of Hazardous Air Pollutants (HAPs) in this permit the facility wide total emissions to the atmosphere of HAPs as defined by Section 112(b) of the 1990 Clean Air Act Amendments shall be less than 10 TPY of any single HAP and less than 25 TPY of combined total of HAPs from the facility.

a. The permittee shall on a monthly basis determine and keep record of the total amount of HAPs emitted from the facility during the past year on a rolling 12-month total basis. Records of this determination shall be on an individual HAP basis and summing the total amount of HAP emitted during the previous 12-months. All records used to determine the

amount of HAPs emitted must include but not be limited to sample calculations and collected data (i.e. fuel consumption, hours operated).

3.1.8. Notwithstanding the specific emission limits for VOCs in this permit the facility wide total emissions to the atmosphere of VOCs as defined by 45 CSR §14-2.85 shall be less than 100 TPY from the facility which must include fugitive sources. Compliance with this limit is met by the use of controls and annual throughput limit of certain commodities stated in Conditions 4.1.1. and 4.1.2.

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. VOC emissions from storing of VOL in the storage tanks at the facility shall not exceed 21.3 tons per year. For the purpose of ensuring compliance with this emission limit, Storage Tanks identified as Tank 225-1, Tank 150-2, Tank 150-3, Tank 100-4, and Tank 54-5 shall be operated and maintained in accordance with the following:

a. The total 12-month rolling throughput through these vessels shall not exceed the following by product type:

Table #4.1.1.a. Tanks Throughput limits

Product	Combined total of Crude Oil and Natural Gas Condensate*	Vacuum Gas Oil & Fuel Oil #2 through #6
Volume (barrels)	40,466,410	5,183,280

* These limits would limit the VOC emissions from the five storage tanks to 21.27 tpy.

b. Each of these tanks (vessels) shall be equipped and maintain with an internal floating roof with two seals. The two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside the storage vessel. The floating roof shall float on the stored liquid at all times while the vessel is in service, except during initial filling and during those intervals when the storage vessels are completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. **[40 CFR §§60.112b (a)(1)(i) and (ii)(B)]**

c. Deck Fittings. Opening through the deck of the floating roof shall be equipped as described in the following:

i. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface;

ii. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e. no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use;

iii. Each automatic bleeder vent and rim space vent shall be equipped with a gasket and are to be closed at all times when the roof is floating except when being floated off or landed on the roof leg supports;

iv. Each rim space vent shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting;

v. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening;

vi. Each opening for a sample well or deck drain (that empties into the stored liquid) may be equipped with a slit fabric seal or similar device that covers at least 90 percent of the opening, instead of a deck cover;

vii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover; and

viii. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
[40 CFR §§60.112b(a)(1)(C)(v) through (ix)]

4.1.2. The following requirements apply to the marine vessel loading activities associated at the barge dock.

a. The 12 month total combined volume of crude oil and natural gas condensate (NGC) shall not exceed 30,000,000 barrels.

b. The 12 month total combined volume of vacuum gas oil and fuel oil, which includes #2 through #6, shall not exceed 5,183,280 barrels.

c. The permittee shall install, maintain, and operate a marine vapor collection system (MVCS) with a vapor combustion unit (VCU) for the purpose of collecting VOC vapors displaced during loading of inland barges and destroying such VOCs. The VCU, identified as CD-1, shall be operated and maintained in accordance with the following:

i. Emissions from the VCU shall not exceed the following limits:

Table 4.1.2.c.i. - Emission Limits from the VCU

Pollutant	Emission Rate	
	lb/hr	TPY
$PM/PM_{10}/PM_{2.5}$	0.44	1.3
NO_x	14.50	63.5
CO	8.70	38.1
VOCs	17.53	52.6

ii. The VCU shall be operated and maintained in a manner to achieve a minimum destruction efficiency of 98% for VOCs. For the purposes of satisfying this requirement the following criteria must be meet:

1. The net heating value of the collected vapors, with or without supplement fuel (enrichment gas), shall be at or greater than 11.2MJ/scm (300 Btu/scf).

2. The exit velocity of the VCU shall not exceed the maximum permitted velocity as determined in the following:

$$V_{max} = 8.706 + 0.7084\ H_T$$

Where:

$H_T = The\ Net\ Heating\ Value\ of\ the\ vapors, \frac{MJ}{scm}.$

$V_{max} = Maximum\ permitted\ velocity, \frac{m}{sec}$

$8.706 = Constant$

$0.7084 = Constant$

iii. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a heat sensing device with recording system, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame. Such system must either record when a flame is present or when a flame is not present.

iv. The flare shall be designed and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. Test Method 22 in Appendix A of 40 CFR Part 60 shall be used to determine the compliance with the visible emission provisions. The observation period is two (2) hours and shall be used according to Method 22;

d. The maximum loading rate for the entire marine loading rack shall not exceed 5,000 barrels per hour (210, 000 gallons per hour).

e. When loading crude oil or natural gas condensate (NGC), the vapor discharged from the barge shall be collect by the MVCS and routed to the VCU at all time when engage in such operations. The combined 12 month-rolling total throughput of these products shall not exceed 30,000,000 barrels (1,260,000,000 gallons). This throughput limit corresponds to the emission limits in Table 4.1.2.c.i.

f. All marine vessels (tanker barges) shall be submerged filled. The discharge point of the cargo tank filling line must be no higher above the bottom of the cargo tank or sump than 10 cm (4 inches) or the radius of the filling line, whichever is greater.
[40 CFR §63.560(a)(4) and 46 CFR §153.282]

g. Fugitive VOC emissions from loading fuel oil grades #2 though #6 and vacuum gas oil shall not exceed 6.2 on a combined 12 month rolling total. Compliance with this limit shall be met by limiting the combined 12-month rolling total of these products to 5,183280 barrels (230,297,760 gallons).

4.1.3. The installation, operation, and maintenance of Steam Boilers #1 and Hot Oil Heaters #1 and #2, identified as emission points EP-10, EP-8, and EP-9 respectively, shall be conducted in accordance with the following limitations:

a. Hourly and annual emission limitation from Boiler #1 shall not exceed the following:

Table #4.1.3.a. – Emission Limits for Boiler #1		
Pollutant	Fuel Oil Fired	
	Hourly Rate lb/hr	Annual Rate (TPY)
$PM/PM_{10}/PM_{2.5}$ Includes Filterable & Condensable Fractions	1.54	6.74
SO_2	27.15	9.9
VOCs	0.04	0.01

b. Steam Boiler #1 shall be fueled with either #1 or #2 fuel oil. The sulfur content of such fuels shall not exceed 1.0 percent by weight as combusted.

c. The maximum amount of any fuel combusted in Steam Boiler #1 shall not exceed 181 gallons per hour and 132,139 gallons of fuel per year, which shall be determine on a 12 month rolling total.

d. The permittee shall conduct biennial performance tune-ups of Steam Boiler #1. The initial tune-up must be completed by no later than October 1, 2012 or the effective compliance date for the tune up (40CFR§63.11196(a)(1)) in the final rule addressing the proposed reconsideration of Subpart JJJJJJ of 40 CFR Part 63. Then, each tune-up thereafter must be conducted no later than 25 months after the previous tune-up. Such tune-up must be conducted in accordance with i. through vi. of this condition. These requirements are only required if the facility elects to operate Steam Boiler #1.

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months).

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly

iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

vi. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.
[40CFR§§63.11223(b)]

e. Hot Oil Heaters #1 and #2 shall only be fired with pipeline quality natural gas.

f. Visible emissions from Emission Points EP-8, EP-9, and EP-10 shall not exceed 10% opacity.
[45CSR§2-3.1]

g. As part of the work practice standards of Subpart JJJJJJ of 40 CFR 63, the permittee must have a one-time energy assessment performed by a "qualified energy assessor" as defined in 40 CFR §63.11237. This assessment energy must include the following:

i. A visual inspection of the boiler system;

ii. An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;

iii. Inventory of major systems consuming energy from affected boiler(s);

iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

v. A list of major energy conservation measures;

vi. A list of energy savings potential of the energy conservation measures identified;

vii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

This energy assessment must be completed by no later than March 21, 2014.

4.1.4. **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. Prior to initial filling after the internal floating roof has been installed for each of the tanks identified in Condition 4.1.1., the permittee shall visually inspect the internal floating roof, the primary seal, and secondary seal for holes, tears, other openings or defects. The permittee shall repair all deficiencies prior to filling the tank. Record of such inspection shall identify the tank on which the inspection was performed, date of inspection, and condition of each component of the internal floating roof (seals, internal floating roof, and fittings). Such records shall be maintained in accordance with Condition 3.4.1.
[40 CFR §§60.113b(a)(1) and 115b(a)(2)]

4.2.2. The permittee shall conduct inspections of the internal floating roof for the tanks identified in Condition 4.1.1. in accordance of one of the following:

a. At least once every 12 months after initial fill and thereafter for the tanks identified in Condition 4.1.1., the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed. If the internal floating roof is not resting on the surface of the VOL inside the storage tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in

this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Director or Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
[40 CFR §§60.113b(a)(2) and (b)(ii)] or

b. At least once every five years after initial fill and thereafter for the tanks identified in Condition 4.1.1., the permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL.
[40 CFR §§60.113b(a)(3)(i) and (a)(4)]

Records of such inspections shall identify the tank on which the inspection was performed, date of inspection, and condition of each component of the internal floating roof (seals, internal floating roof, and fittings). Such records shall be maintained in accordance with Condition 3.4.1. Such records of inspections and repairs shall be maintained in accordance with Condition 3.4.1.
[40 CFR §60.115b(a)(2)]

4.2.3. The permittee shall monitor and record the amount of throughput of products/commodity through the facility on a monthly basis. Such records shall identify the amount and type of product transferred to and from the each storage tank listed in Condition 4.1.1. In addition, the permittee shall maintain a 12 month rolling total of throughput for each storage tank and of products/commodity actually loaded though the marine vessel loading dock. Such records shall be maintained in accordance with Condition 3.4.1.
[40 CFR §63.567(j)(4)]

4.2.4. The permittee shall monitor and record the amount of fuel consumed, by fuel type, for Boiler #1 on a monthly basis. In addition, the permittee shall keep a 12-month rolling total of fuel consumed by the boiler. Such records shall be maintained in accordance with Condition 3.4.1.
[45 CSR §2-7.1.a.6.]

4.2.5. Within 60 days after completing the boiler tune-up for Steam Boiler #1, the permittee shall conduct a visible emission observation of the exhaust from Steam Boiler #1 in accordance with Condition 4.1.3.f. Such observation shall be conducted in accordance with U.S. EPA Method 22 or Method 9. Records of such observations shall be maintained in accordance with Condition 3.4.1.

4.3. Testing Requirements

4.3.1. In order to demonstrate compliance with the flare opacity requirements of 4.1.2.c.iii., the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of five (5) minutes during any two consecutive hour period using Method 22 in Appendix A of 40 CFR Part 60. The permittee shall conduct this test within thirty (30) days of permit issuance and once every five years thereafter. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of

uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR 60, Appendix A, Method 22 or from the lecture potion of 40 CFR 60, Appendix A, Method 9 certification course.

4.3.2. The permittee shall conduct an initial vapor combustion unit compliance assessment to demonstrate compliance with the requirements of Condition 4.1.2.c.ii and the flare design evaluation within 180 days after start-up. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2A, 2B, 25A and 25B in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. During such assessment, the minimum loading rate to the marine vessel shall be 4,500 barrels per hour (90% of the maximum loading rate). Other data to be recorded during the assessment shall be the highest, lowest, and average loading rates, measured oxygen concentration from the oxygen analyzer, natural gas (enrichment gas) add, and product(s) loaded. Such testing shall be conducted in accordance with Condition 3.3.1.

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. For the purpose of demonstrating compliance with Condition 4.1.2.c.iii., the permittee shall maintain records of the times and duration of all periods in which the pilot flame was absent during loading operations that required the MVCS to be used in accordance with Condition 4.1.2. Said records shall be maintained in accordance with 3.4.1. of this permit.

4.4.5. The permittee shall calculate an annual estimate of total HAPs emissions from the barge dock which includes the MVCU and VCU. Such estimate shall not include commodities exempted by 40 CFR §63.560(d), which are commodities with a vapor pressure less than 10.3 kPa (1.5 psia) at standard conditions (20^0C and 760 mmHg). Such calculations shall be conducted on a calendar year basis and completed by no later than March 1 for the previous year. Such estimates shall be maintained in accordance with Condition 3.4.1.
[40 CFR §63.567(j)(4)]

4.5. Reporting Requirements

4.5.1. The permittee shall notify the Director and Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel identified in Condition 4.1.1. for which an inspection is required by Condition 4.2.1. and Condition 4.2.2.b. of this section to afford the Director or Administrator the opportunity to have an observer present. If the inspection required by Condition 4.2.2.b.of this section is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Director or Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Director or Administrator at least 7 days prior to the refilling.
[40 CFR §60.113b(a)(5)]

4.5.2. The permittee shall submit a report that describes the control equipment (internal floating roof) for the tanks identified in Condition 4.1.1. and certifies that each internal floating roof meets the requirements of items b and c of Condition 4.1.1. to the Director and Administrator. Such report shall be an attachment to the notification required by 40 CFR §60.7(a)(3).
[40 CFR §60.115b(a)(1)]

4.5.3. If any of the conditions described in item a of Condition 4.2.2. are detected during the annual visual inspection as required by Condition 4.2.2., a report shall be submitted to the Director and Administrator within 30 days of the inspection. Each report shall identify the tank, the nature of the defects, and the date the tank was emptied or the nature of and date the repair was made.
[**40 CFR §60.115b(a)(3)]**

4.5.4. After each inspection required by item b of Condition 4.2.2. that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in item b of Condition 4.2.2, a report shall be furnished to the Director and Administrator within 30 days of the inspection. The report shall identify the tank and the reason it did not meet the specifications of Condition 4.1.1. and list each repair made.
[**40 CFR §60.115b(a)(4)]**

4.5.5. Any exceedance(s) of the VCU design and operation criteria in Condition 4.1.2.c. shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days.

4.5.6. For the purpose of compiling with 40 CFR §63.11225(a)(4), the permittee shall submit to the Director and Administrator a Notification of Compliance for Boiler #1 with the work practices (boiler tune-up and one time energy assessment) of 40 CFR 63, Subpart JJJJJJ by no later than 120 days after the compliance date set forth in Condition 4.1.1.g. The notification must be signed by a responsible official who shall certify its accuracy. Attesting to whether the source has complied with the following certifications:

"This facility complies with the requirements in §63.11214 (Condition 4.1.3.d.) to conduct an initial tune-up of the boiler." and/or

"This facility has had an energy assessment performed according to §63.11214(c) (Condition 4.1.3.g.)."

The permittee may use the "Initial Notification of Compliance Status for Boiler Subject to Tune-ups- AREA SOURECS" form posted at http://www.epa.gov/ttn/atw/boiler/boilerpg.html#DOC .

This notification shall include the following information:

a. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.

b. A description of any corrective actions taken as a part of the tune-up of the boiler.

c. The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

[40CFR§63.9(h)(2) and §§63.11225(a)(4)(i) and (ii)]

APPENDIX A–Example Opacity Record

Date of Observation: _____

Data Entered by: _____

Reviewed by: _____

Date Reviewed: _____

Describe the General Weather Conditions:

Emission Point ID	Emission Point Description	Observation Time	Visible Emissions Yes/No	Consecutive Months of Visual Emissions	Comments

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.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

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

Telephone No. _____ Fax No. _____

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[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.