

217/782-2113

"REVISED"
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
MARINE TERMINAL/NESHAP SOURCE - SPECIAL

PERMITTEE

Toscopetro Corp./Wood River Refining
Attn: Christina McDowell
P.O. Box 262
Wood River, Illinois 62095

Application No.: 87120058 I.D. No.: 119090AAA
Applicant's Designation: WRR-41 Date Received: November 3, 1995
Subject: Shell Hartford Dock
Date Issued: October 10, 1996 Expiration Date: October 10, 2001
Location: SA-11A and Route 111, Roxana

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a barge dock for sulfuric acid and caustic barge loading/unloading, a petroleum products barge loading/unloading operation, and a benzene barge loading operation that is controlled by a vapor collection system that is vented to a flare pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This Federally Enforceable State Operating Permit is issued to address the requirements of 35 Ill. Adm. Code 219.762(c)(2) which allows reductions of VOM emissions equivalent to 7,554 lb/day through a federally enforceable emission reduction plan as an alternative to adding a control to the marine terminal used in the loading of gasoline and crude oil. This federally enforceable operating permit approves such a plan.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. The loading of gasoline and crude oil into marine vessels during the regulatory control period of May 1 to September 15 of each year shall not exceed 46,900 barrels/day.
- d.
 - i. For a portion of the reduction, the Permittee is relying on the reductions from converting the following oil/water separators to junction boxes and will continue to operate them as junction boxes: Gas Plant OWS (included as a portion of the Vapor Blowdown system) (72110619), aromatics west OWS (72110611), separator box 2 (72110615), separator box 11 (72110620), separator box 5 (73010832), Aromatics East OWS (72110622), separator box 8 (72110624), alkylation plant OWS (72110630), and separator box 6 (72110633). These changes will result in an overall reduction of 5,859 lb/day as summarized in Table I.

- A. The Permittee shall maintain fixed covers on all junction boxes identified in Table 1.
 - B. Junction box cover(s) shall have a tight seal(s) around the edge and the cover(s) shall be kept in place at all times, except during inspection and/or maintenance.
 - C. If a cover has access doors or hatches, such access doors or hatches shall be kept closed at all times except during inspection and/or maintenance.
 - D. The Permittee shall keep a written record of any inspection and/or maintenance, excluding routine sampling and gauging activities, which requires removal of any junction box cover or opening of any access door or hatch on a junction box cover.
- ii. To accomplish a portion of these reductions, the Permittee has accepted a restriction on the amount of gasoline and crude oil that can be loaded through the marine terminal. This restriction will result in an overall reduction of emissions of 1,696.5 lb/day as summarized in Table II.
 - iii. The combination of reduction in emissions from converting the nine oil/water separators to junction boxes and from limiting the throughput of the marine terminal to 46,900 barrel/day provides a reduction of 7,554 lb/day, as required pursuant to 35 Ill. Adm. Code 219.762(c)(2). $(5,858.8 + 1,696.5 = 7,555.3)$
- 2a. This benzene barge dock, vapor collection system, and flare contain sources subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) for benzene transfer operations, 40 CFR 61, Subparts A and BB. The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.
 - b. The vapor collection system shall be operated and maintained to comply with applicable requirements of the NESHAP, 40 CFR 61.302(a), (e), (f), (g), (j), (k), and (l).
 - c. The benzene vapors generated in loading the barges at the benzene loading operation shall be collected and ducted to a flare that is operated in accordance with 40 CFR 60.18(b) through (f) pursuant to the NESHAP, 40 CFR 61.302(c).
 - d. Any marine vessel that is loaded with benzene at this facility shall be demonstrated to be vapor tight in accordance with 40 CFR 61.302(e).

- e. At all times, the Permittee shall also, to the extent practicable, maintain and operate the barge loading facility, vapor collection system, and flare, in a manner consistent with good air pollution control practice for minimizing emissions.
- 3. The Permittee shall operate a continuous monitoring system (heat sensing device) to confirm the presence of a flame on the flare used to control the benzene barge loading operation. The heat sensing device shall be installed in accordance with the provisions of 40 CFR 61.303(b) and the applicable procedures of Appendix B and C.
- 4a. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of the NESHAP, 40 CFR 61.07 and 61.305.
- b. Pursuant to 35 Ill. Adm. Code 219.770(c) the Permittee shall maintain records of daily volume of gasoline and crude oil loaded.
- 5. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Agency request for records during the course of a source inspection.
- 6. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Agency's Compliance Unit in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.

The following special conditions are not federally enforceable:

- 7. All reports, notifications, tests, etc. required by this permit shall be sent to:

Illinois EPA
Bureau of Air
Compliance Unit (#40)
P.O. Box 19276
Springfield, IL 62794-9276

and

Page 4

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

8. The following Standard Conditions are not federally enforceable:
Standard Conditions 3(a), 8, 9, 10 and 11.

If you have any questions on this permit, please call Bradford S. Kohlmeier at 217/782-2113.

Donald E. Sutton, P. E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:jar

cc: IEPA, FOS Region 3
IEPA, Compliance Unit
USEPA

TABLE I

<u>Emission Unit</u>	1990 Emissions* (Lbs/Day)	1996 Emissions* (Lbs/Day)	Emissions Reduction** (Lbs/Day)
Gas Plant OWS	1,881.9	1,517.4	-1,517.4
Aromatics West OWS	120	96.8	-96.8
Separator Box 2	186.8	150.6	-150.6
Separator Box 11	3,274.4	2,640.1	-2,640.1
Separator Box 5	91.2	73.5	-73.5
Aromatics East OWS	432.0	348.3	-348.3
Separator Box 8	438.3	353.4	-353.4
Alkylation Plant OWS	105.6	85.1	-85.1
Separator Box 6	754.8	608.6	-608.6
Remaining emissions from the junction boxes***			<u>15.1</u>
		Total	5,858.8

* - Based on inventory prepared by IEPA.

** - Full credit was given to emission unit which already had controls that exceeded 85% efficiency.

*** - Based on an emission factor for covered junction boxes of 0.07 lb VOM/hr. ("VOC Emissions from Petroleum Refinery Wastewater Systems" (2/85))

Full credit was given for emission reductions since the emissions represented above were controlled emissions and not uncontrolled emissions.

TABLE II

<u>1996 Projected Throughput (Barrels/Day)</u>	<u>1996 Projected VOM Emissions* (Lb/Day)</u>	<u>Restricted Throughput (Barrels/Day)</u>	<u>Restricted VOM Emissions* (Lb/Day)</u>	<u>Emissions Reduction (Lb/Day)</u>
58,780	8,393.8	46,900	6,697.3	-1,696.5

* Based on an emission factor of 3.4 lb VOM/1000 gallons of gasoline loaded, without use of control.

BSK:jar

