



**CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR MANAGEMENT SERVICES**

RACT PLAN APPROVAL

Effective Date: February 9, 2016

Expiration Date: None

Replaces Permit No.: PA-5003 effective on May 29, 1995

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of a Reasonably Available Control Technology (RACT) proposal received under the Pennsylvania Code, Title 25, Chapter 129.91 thru 129.95, of the rules and regulations of the Pennsylvania Department of Environmental Protection (PADEP), Air Management Services (AMS) approved the RACT proposal of the Facility below for the source(s) listed in section 1.A. Emission Sources of the attached RACT Plan Approval.

Facility: Kinder Morgan Liquid Terminals, LLC

Owner: Kinder Morgan Liquid Terminals, LLC
Location: 3300 North Delaware Ave., Philadelphia, PA 19134
Mailing Address: 3300 North Delaware Ave., Philadelphia, PA 19134

SIC Code(s): 4226
Plant ID: 05003

Facility Contact: Tom Stafiniak
Phone: (215) 634-3031

Permit Contact: Tom Stafiniak
Phone: (215) 634-3031

Responsible Official: Rance Tollett
Title: Terminal Manager

A handwritten signature in blue ink, appearing to read "Edward Wiener".

Edward Wiener, Chief of Source Registration

2/9/2016

Date

The RACT plan approval is subject to the following conditions:

1. The purpose of this Plan Approval is to establish Volatile Organic Compound (VOC) Reasonably Available Control Technology (RACT) for Kinder Morgan Liquid Terminals, LLC. This includes the following emission sources and control equipment:
 - A. Emission Sources:
 1. Controlled tank car/truck loading rack positions. Each controlled rack loading position is connected to the NAO Thermal Oxidation Unit.
 2. Uncontrolled tank car /truck loading positions. Each uncontrolled rack loading position is not connected to a control device.
 3. Marine vessel loading operations, two loading berths.
 4. Fugitive emissions.
 - B. Control Equipment:
 1. NAO Thermal Oxidation Unit-This unit is associated with controlled tank car/truck loading positions. This unit captures VOC emissions from controlled car/truck loading positions.
 2. Marine Vapor Combustion Unit. This unit captures vapors from cumene loading at the marine vessel loading operations.

2. This approval authorizes:
 - A. Volatile Organic Compounds (VOC) liquids with a Reid Vapor Pressure (RVP) greater than or equal to 4.0 pounds per square inch (psi) shall only be loaded into tank car/truck loading positions connected to the NAO Thermal Oxidation Unit complying with 0.0668 pounds (30.3 grams) of organic liquids (measured as propane) are emitted to the atmosphere for every 100 gallons (380 liters) of liquids loaded. [25 Pa Code 129.59]
 - B. Each uncontrolled tank car/truck loading position shall be limited to processing organic liquid with an RVP less than 4.0 pounds per square inch (psi).
 - C. Marine vessel loading operations shall not process petroleum distillate with a vapor pressure of 4.0 RVP or greater.

3. Emission Limitations
 - A. Controlled tank car/truck loading positions at the facility shall comply with the following:
 1. The total combined VOC emissions from all controlled tank car/truck loading rack positions at the facility shall be less than 57.0 pounds per hour.
 - B. Loading operations at “uncontrolled tank car/truck loading positions” shall comply with the following:
 1. Total combined emissions from all “uncontrolled tank car/truck loading positions” at the facility combined shall be limited to 129 tons of VOC per 12 month rolling period;
 2. Emissions from each “uncontrolled tank car/truck loading position” shall not exceed 9.0 tons of VOC per 12 month rolling period;
 3. Emissions from each “uncontrolled tank car/truck loading position” shall not exceed 18.1 pounds of VOC per hour.
 - C. Marine loading operations at the facility shall comply with the following:

1. Marine vessel loading operations shall not exceed 51 tons of VOC per 12 month rolling period;

D. Fugitive emissions shall comply with the requirements of AMR V Section XIII.

4. Testing Requirements

A. Kinder Morgan shall conduct stack testing per AMS approved protocol on the NAO Thermal Oxidation Unit at least every five (5) years.

1. Initial testing must commence no later than 18 months following the effective date of this plan approval.

B. Kinder Morgan shall conduct stack testing per AMS approved protocol on the Marine Vapor Combustion Unit at least every five (5) years.

1. Initial testing must commence no later than August 30, 2017 (five years after the initial stack test) .

5. Monitoring Requirements

A. Kinder Morgan shall monitor throughput of material processed and vapor pressures for all tanks, marine loading, and tank car/truck loading racks on a daily basis.

6. Recordkeeping and Reporting Requirements

A. For controlled and uncontrolled loading tank car/truck operations, Kinder Morgan Liquid Terminals, LLC shall keep records of the following:

1. Which rack is being used for loading;
2. Which position at each rack is being used for loading;
3. Whether the position being used for loading is controlled or uncontrolled;
4. The name of material loaded per position;
5. Throughputs of each material loaded per position;
6. The corresponding vapor pressures of the material loaded per position;
7. Emissions calculations from all controlled loading rack positions to demonstrate compliance with the lb/hour limit of Condition 3.A.1
8. Emissions calculations from all uncontrolled loading rack positions on a monthly and rolling 12 month period to demonstrate compliance with Condition 3.B.1
9. Emissions calculations per uncontrolled loading rack position on an hourly, monthly, and rolling 12-month period to demonstrate compliance with Conditions 3.B.2 and 3.B.3

B. For marine vessel loading operations, Kinder Morgan Liquid Terminals, LLC shall keep records of the following:

1. The name of material loaded;
2. Whether the loading is controlled or uncontrolled;
3. Throughputs of each material loaded;
4. True vapor pressures and verification that the material loaded has a RVP of less than 4.0;

5. Emission calculations on a monthly and rolling 12-month period to demonstrate compliance with Conditions 3.C.1.

- C. Kinder Morgan Liquid Terminals, LLC shall monitor and maintain a file containing all the records and other data that are required to be collected to demonstrate compliance with VOC RACT requirements.
- D. The records shall provide sufficient data and calculations to clearly demonstrate that the VOC RACT requirements are met.
- E. Data of information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
- F. Records shall be kept for at least five (5) years and shall be made available to AMS on request.

7. RACT Implementation Schedule
 - A. Upon issuance of this approval, Kinder Morgan Liquid Terminals, LLC shall begin immediate implementation of the measures necessary to comply with the approved RACT plan approval.

8. Revisions to any emission limitations incorporated in this RACT Approval will require resubmission as revision to the PA State Implementation Plan. The applicant shall bear the cost of public hearing and notification required for EPA approval as stipulated in 25 PA Code SS129.91(h).