

**CITY OF PHILADELPHIA**  
**Department of Public Health**  
**Environmental Protection Division**  
**Air Management Services**

**InterOffice Memo**

**To:** File  
**From:** Maryjoy Ulatowski  
**Date:** June 25, 2015  
**Subject:** RACT Analysis for MIPC LLC - Philadelphia Terminal (PLID # 05004)

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**Introduction:**

The Clean Air Act (CAA) requires that moderate (or worse) ozone nonattainment areas implement reasonably available control technology (RACT) controls on all major sources of Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx). Philadelphia County is part of the Philadelphia-Wilmington-Atlantic City moderate ozone nonattainment area for the 1997 8-hour ozone NAAQS. This document presents the findings of a RACT evaluation for the 1997 8-hour ozone standard for this facility.

**Company Description:**

The Monroe Interstate Pipeline Company (MIPC), Limited Liability Corporation (LLC) - Philadelphia Terminal (formerly ConocoPhillips and Tosco Corporation) is a gasoline terminal located at G Street and Hunting Park Avenue, Philadelphia, PA 19124. The facility's air emission sources include the following:

- One petroleum product truck loading rack. The truck loading rack is controlled by a vapor recovery unit (VRU);
- Five (5) Light Petroleum products storage tanks (each greater than 40,000 gallons and each stores materials with vapor pressures > 1.5 pounds per square inch (psi));
- One (1) Storage Tank (formerly transmix tank- 39,900 gallons, stores materials with Reid Vapor Pressure (RVP) of less than 4);
- Two (2) oil-water separators;
- Light Liquid/Vapor Components Fugitives;
- Three (3) Additive Tanks (each less than 40,000 gallons and each storing materials with vapor pressures less than or equal to 1.5 psi.)

The facility's Title V Operating Permit inventory lists a Transmix Storage Tank (1330). The transmix refers to the interface mixture between two separate products as they are shipped through pipelines. A conservative assumption is that transmix has identical chemical and physical properties to that of gasoline. 25 Pa Code defines gasoline as a petroleum distillate having a RVP of 4 pounds per square inch or greater and which is a liquid at a standard temperature and pressure. No transmix loading to the transmix loading tank has occurred at the facility since the 2012 change of ownership from Conoco Phillips to MIPC, LLC. The Transmix Storage Tank is not used as a transmix tank at the present. The transmix tank is now used as a surge tank which is used as a safety device in order to protect the pipeline at the facility in an event of overpressure in the system. The storage/surge tank(1330) must comply with 25 PA Code 129.57 when storing VOCs with vapor pressure greater than 1.5 psi. The tank is equipped with pressure relief valve and 25 PA Code 129.57 requires the valve to be maintained in good operating condition and are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standard acceptable to the Department.

The facility's Title V Operating Permit inventory also lists a transmix loading spot. No transmix loading at the transmix loading spot has occurred at the facility since the 2012 change of ownership from Conoco Phillips to MIPC, LLC. The transmix loading spot is considered deactivate source and will require an installation permit or Plan Approval if the facility decides to load transmix again in the future.

**Applicability for NOx and VOC RACT:**

MIPC, LLC is not a major source of Nitrogen Oxides (NOx). The potential NOx emission from the facility is limited by the issued AMS permits to less than 100 tons per year the major source threshold in Philadelphia County that is not applicable to NOx RACT.

MIPC, LLC is a major source of Volatile Organic Compound (VOC) emissions having potential VOC emissions of greater than 50 tons per year, the major source threshold in Philadelphia County that is applicable to VOC RACT 1997 8-hour ozone NAAQS.

**Process Descriptions:**

The VOC emissions units at MIPC LLC include the following:

- One Truck Loading Rack vented to the VRU
- Five Light Petroleum Storage Tanks (#1303, #1322, #1311, #1312, & #1314),
- One Storage Tank (#1330, formerly the Transmix Tank)
- Two Oil/Water Separators;
- Light Liquid/Vapor Components Fugitives;

The following are insignificant sources of VOCs:

- Three Additive Storage Tanks (#1300-Approx 2000 gallons, #1350 -Approx 10,000 gallons, & #1351 - approx 19,900 gallons ),

**RACT Analysis:**

In accordance with 25 PA Code 129.91 (a), all the source at the facility will comply with RACT requirements as follows:

The Truck Loading Rack is equipped with Vapor Recovery Unit and complies with the presumptive RACT requirements of 25 PA Code 129.59 and 129.62.

The Light Petroleum Storage Tanks will comply with the presumptive RACT requirement of 25 PA Code 129.56.

When storing materials with vapor pressures greater than 1.5 psi, the former Transmix Tank will comply with the presumptive RACT requirement of 25 PA Code 129.57.

The two Oil/Water Separators complies with CTG (EPA-450/2-77-025) by complying with AMR V Sec III.

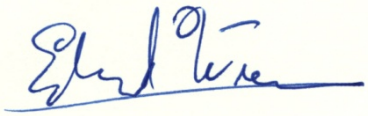
The facility must comply with the CTG regulation AMR V, Section XIII for process equipment leaks. AMR V, Section XIII is in the SIP; therefore, it is considered presumptive/CTG RACT. Process equipment components cannot have VOC leaks that result in VOC concentrations of 10,000 ppmv or greater or are in a liquid state.

The three Additive Storage Tanks store additives with vapor pressures less than 1.5 pounds per square inch and are not applicable to the presumptive RACT requirement of 25 PA Code 129.57. The sources are considered de minimus sources for RACT purposes since the potential VOC emissions for each tank is less than 1 ton per year. Based on AMS permitting and engineering knowledge, AMS determines that installing any control technology on such small source is both technically and economically unreasonable.

There was no 1997 1-hr RACT case by case determination for the facility. All sources were covered by the same presumptive or CTG RACT regulations as mentioned above or are insignificant sources.

**RACT Recommendations/Conclusions:**

All the sources at the facility are covered by presumptive or CTG RACT requirements or are insignificant sources.



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**Edward Wiener, Chief of Source Registration**

6/25/15\_\_\_\_\_

**Date**