

# Monroe RACT III

#### What Does the Facility Do?

Monroe Refinery, LLC (Monroe) owns and operates a petroleum refinery located on the Delaware River in the Borough of Trainer, Delaware County, Pennsylvania.

#### Air Quality Permitting Background

Monroe's air emission sources are regulated under DEP's Title V Operating Permit (TVOP) 23-00003. Emission sources associated with this facility include the following: process units, boilers, process heaters, storage tanks, wastewater treatment and diesel-fired internal combustion engines. Monroe's TVOP 23-00003 regulates the operations of air emission sources by setting limits on allowable emissions and requiring specific recordkeeping, reporting, and work/operating practice standards.

Monroe submitted a significant operating permit modification application to DEP's Southeast Region Air Quality division to demonstrate how they would meet the Reasonably Available Control Technology (RACT) III requirements under 25 Pa. Code §§ 129.111-129.115. RACT III requirements are defined later in this information sheet.

#### What is RACT III?

The RACT III standards codified under 25 Pa. Code §§ 129.111-129.115 were created to satisfy the 2015 National Ambient Air Quality Standards (NAAQS) for ozone gas. The NAAQS are established by the U.S Environmental Protection Agency (EPA) as the maximum amount of specific air contaminates that are allowed into the atmosphere in order to protect public health and welfare. RACT requirements apply statewide to the owner or operator of any major Nitrogen Oxides (NOx) emitting facility, any major Volatile Organic Compounds (VOC) emitting facility or both when the installation/modification of the source(s) occurred on or before August 3, 2018.

Monroe is designated as a major NOx and a major VOC emitting facility. Monroe identified sources and DEP reviewed whether those NOx and VOC emitting sources at the facility were:

- Exempt from RACT
- Meet the presumptive RACT requirements for commonly used sources like boilers and generators.
- Required to establish an alternative RACT standard for sources that either cannot meet the presumptive RACT requirements or have no limit under RACT III for those specific sources.

#### What changes to the Title V Operating Permit Were Made?

- No new sources were added through this permitting action.
- No emissions increases were included.
- The permit was updated to include applicable Presumptive RACT III requirements.
- After evaluation of the Alternative RACT III Standards proposed by Monroe, the Title V Permit for Monroe was
  revised to add the appropriate citations under 25 Pa. Code §§ 129.111-129.115 to the conditions of the permit
  under each applicable source that are to become part of the State RACT III Plan to meet the NAAQS for
  Ozone. The sources affected by this Case-by-case RACT III analysis are as follows:
  - FCC Unit (Source ID 101): This source has an existing control in place for NOx emissions (Selective Noncatalytic Reduction (SNCR)) and good operating practices are the RACT III standard for this source. Good operating practices means the company must use its equipment and pollution control systems the way the manufacturer intended, following the instructions in the operation manuals.
  - Peabody Heater (Source ID 130): Good operating practices are the RACT III standard for controlling NOx from this source because this is a limited use boiler that is only used to bring the FCC Unit up to the operating temperature. Once reactions start in the FCC Unit, this source no longer needs to operate.
  - **Disulfide Oxidizer Separator (Source ID 129):** Good operating practices and the venting of the exhaust



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from the Disulfide Oxidizer Separator to the CO Boiler (Source ID C01) are the alternate RACT III standard for controlling VOC emissions to the atmosphere and immediate area. The company is not allowed to change or use the equipment in ways it wasn't designed for. The CO Boiler is used to destroy the VOC's from the Disulfide Oxidizer Separator.

 ULSG Cooling Tower (Source ID No. 702): Good Operating Practices and Leak Detection and Repair (LDAR) are the alternate RACT III standard for controlling VOC emissions from the ULSG Cooling Tower. By limiting leakage from the process heat exchangers into the cooling water that is circulated to the tower, VOC emissions to the atmosphere are reduced.

### Will there be a Public Hearing and How can Public Comments be Submitted?

- A Public Hearing was held on January 30th, 2025, at the Marcus Hook (Curt Weldon) Community Center in Marcus Hook, PA. DEP will formally respond to all comments received.
- Feedback from attendees indicated that the permit information presented by DEP lacked sufficient clarity on the permitting actions. In response, this information sheet was developed to provide the public with a plainlanguage explanation of those actions. Based on this feedback, DEP will prepare similar information sheets in advance of future public hearings and meetings.

## Where can I Review the Application?

Monroe's significant modification application, DEP's review memo and draft permit are on our website at: <u>RACT III | Department of Environmental Protection | Commonwealth of Pennsylvania</u>

Who can I Contact with Questions or Comments?

Additional comments and questions can be directed to ra-epseroaqpubcom@pa.gov