



What Does the Facility Do?

PQ LLC (PQ) owns and operates a sodium silicate production facility located in Chester City, Delaware County, Pennsylvania.

PQ's Air Quality Permitting Background

PQ's air emission sources are regulated under the Department of Environmental Protection's (DEP) Title V Operating Permit (TVOP) 23-00016. The emission sources at PQ include a Sodium Silicate Furnace, two boilers, spray dryer with scrubber, and an emergency generator. PQ's TVOP 23-00016 regulates the operation of air emission sources by setting limits on emissions and requiring specific recordkeeping, reporting, and work practice standards.

What is RACT III?

Reasonably Available Control Technology (RACT) is a standard under the [U.S. Clean Air Act](#) that addresses existing facilities located in a region which exceeds the limits for air quality standards. The facilities should reduce emissions to the prescribed limitations considering the technology available and the cost of using those controls. The U.S. Clean Air Act requires each state to reevaluate its RACT requirements each time the U. S. Environmental Protection Agency (EPA) revises or sets a new National Ambient Air Quality Standards (NAAQS).

EPA revised the ground-level ozone NAAQS in 2015 so a RACT analysis (RACT III) must be done for facilities which:

- Emitted greater than 50 tons a year of Nitrogen Oxides (NOx) and/or greater than 50 tons a year of Volatile Organic Compounds (VOC);
- Installed or modified equipment on or before August 3, 2018; and,
- Were located in an area that did not meet the air quality standard.

When reevaluating RACT emission limitations and requirements, the Department of Environmental Protection (DEP) must consider the technology available and the cost of using those controls to achieve compliance with the prescribed emission limitations.

How Does a Facility Comply with the RACT III regulation?

The following are ways a facility can meet the RACT III regulation:

1. Presumptive RACT – the facility can either (a) meet the prescribed emission limits for the specific source(s) or (b) install required controls to meet the prescribed emission limits.
2. Facility-wide or System-wide averaging - the facility can average emissions across a group of sources or with other facilities located in the same region to show overall compliance with the prescribed emission limitations.
3. Case-by-Case RACT – If the facility cannot meet the prescribed emission limits or there is no prescribed emission limitation for their sources, the facility can propose its own plan.

Why is DEP not Requiring Facilities to Install the Newest Control Technology?

When establishing RACT emission limitations and requirements to control NOx and VOC, DEP must consider the technology available and the cost of using these controls. DEP will not require facilities to use control technology, which is too costly or not technically practical, as dictated by the U.S. Clean Air Act.



Didn't PQ already go through RACT III?

Yes. PQ previously submitted a notification of RACT III applicability and intention for the Furnace (Source 102) to comply with presumptive RACT III requirements on operating days in December 2022. As the NOx limit for the furnace did not change, the permit was not amended at that time.

The furnace periodically operates in an idle mode, where the furnace maintains enough heat to keep material inside the furnace from solidifying, but there is no production. Previously, DEP determined that RACT III didn't apply under idling conditions. After receiving guidance from EPA in April 2025 to re-evaluate RACT for the idling emissions, DEP requested PQ to address the emissions during idle mode.

What did PQ propose with this application?

- No new sources or air pollution controls were proposed through this permitting action.
- No emissions increases were included.
- PQ LLC proposed a daily NOx emission limit of 1,304.4 pounds of NOx per non-operating (idling) day.

What will change in PQ's TV Permit as a result of this permitting action?

When DEP is satisfied with PQ's alternative RACT proposal, then respective requirements will be added to address emission limitation, monitoring and recordkeeping during non-operating (idling) days.

Why is There a Public Hearing?

If a facility proposes to comply with the RACT III regulation using option 1(b) to install control to comply with the presumptive requirements or option (3) Case-by-case RACT determination, **a public hearing is required as part of the submittal of RACT III proposals to EPA for their approval and revision to the Commonwealth's State Implementation Plan (SIP).**

What is a Public Hearing?

Public hearings are formal sessions to receive testimony from the public on a specific action. Hearings do not offer two-way communication - DEP staff is not able to answer questions about the proposed action during the hearing.

Comments will be limited to 3 to 5 minutes (Decided for each individual hearing). Comments are considered and responded to by DEP after the hearing in a Comment and Response document. Written and spoken testimony are considered equal by DEP.

Can Comments About Items Outside This Permit Action Be Considered by DEP?

DEP can only consider comments specifically related to the item under review with the RACT III application.

Where can I Review the Application?

RACT III applications under review with DEP's Southeast Regional Office can be found on DEP's website. The website will also provide a summary of what sources are being reviewed for RACT III compliance.

[RACT III | Department of Environmental Protection | Commonwealth of Pennsylvania](#)

Who can I Contact with Questions or Comments?

Please e-mail questions or comments to: ra-epseroagpubcom@pa.gov