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To: <u>Brown, Don</u>

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Dana; Davis, Rory; Hubbard, Ross D

Subject: [External] Rulemaking Docket R20225-017 - NOX RACT - Post Hearing Comment Submittal

Date: Thursday, December 12, 2024 9:15:23 AM

Attachments: Outlook-A logo wit.png

12-12-2024 Comment Submittal.pdf

Please find below, and attached, comments regarding the Rulemaking Docket R20225-017 - NOX RACT.

Equistar Chemicals, LP in Morris, Illinois has numerous combustion sources subject to the revised Part 217 regulations. Specifically, the Ethylene Unit has thirteen identical "SRT-1" cracking furnaces. Furnaces emissions exhaust through common stacks for a pair of furnaces, with the thirteenth furnace having its own stack. Thus, there are a total of 7 stacks.

The amended rule presents two challenges. First, many of the stacks do not have emission testing ports. Second, the installation of these ports requires significant unplanned production downtime on two furnaces. As the Ethylene Unit runs seven years between shutdowns, the furnace downtime is minimized to optimize production. Furnace downtime is taken intermittently for routine maintenance, but this downtime is usually only on a single furnace at a time, not two furnaces. As such, the planning impacts on both production and routine maintenance are significant. Currently there are seven (7) furnaces for which exhaust stacks do not have emission testing ports. The other six (6) SRT-1 furnaces have emission testing ports and have demonstrated the capability to meet the revised NOx emission limits, as current construction permits have the same NOx emission limit for the SRT-1 furnaces. The remaining furnaces are expected to have similar emission testing results.

The Ethylene Unit also has a Steam Superheater for which historical testing indicates an inability to meet the revised 0.08 lb/mmbtu as required by NOxRACT Subpart E. Significant capital investment is required to upgrade the Steam Superheater burners in order to meet the revised limits. Due to the cost and complexity of the project to upgrade the steam superheater, Equistar requests a 12/31/2027 compliance deadline. The normal project process for a project of this cost includes multiple stages with varying timelines. Equistar is currently working through the first two stages. The first stage includes scope definition, identifying alternatives, and design selection. The second stage includes defining drawings, equipment data sheets, and identifying suppliers. The third project stage includes engineering design work and review of burner design and associated drawings. Equistar expects the first two stages to be completed in 2025 with the third stage potentially beginning in late 2025.

Stage 4 includes generation and issuance of drawings for fabrication and construction. Stage 4 also includes the field installation and construction activities. Stage 4 includes substantial

lead times for equipment and is expected to begin sometime in 2026 and extend into 2027. After completion of this final stage, commissioning and testing of the equipment takes place before turning over to operations.

Equistar Chemicals, LP requests that provisions similar to those proposed in Section 217 Appendix I also be provided to Equistar Chemicals, LP (Facility ID 063 800 AAC).

Proposed Rule Language

- Revise the name of Appendix I to be "Compliance Dates for Certain Emission Units at Petroleum Refineries and Petrochemical Facilities"
- Add the following table:

Equistar Chemicals, LP (Facility ID 063 800 AAC)

Point	Emission Unit Description	Compliance Date
0025	Steam Superheater	December 31, 2027
0026(a)	Cracking Furnaces 101/102	May 1, 2026
0026(a)	Cracking Furnaces 105/106	May 1, 2026
0026(a)	Cracking Furnaces 107/108	May 1, 2026
0026(a)	Cracking Furnace 113	May 1, 2026

Thank you and please reply to verify receipt.



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