

UNITED STATES OF AMERICA,	)	
	)	
	)	
Plaintiff,	)	CIVIL ACTION NO. 2:23-cv-735
	)	
v.	)	SECTION J(5)
	)	
DENKA PERFORMANCE ELASTOMER	)	JUDGE BARBIER
LLC and DUPONT SPECIALTY	)	
PRODUCTS USA, LLC,	)	MAGISTRATE JUDGE NORTH
	)	
Defendants.	)	
	)	

Introduction

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2. This Supplemental Declaration addresses two points. First, since my Remedy Declaration, DPE's Neoprene manufacturing facility ("Facility") has continued to operate, and the Facility has continued collecting monitoring data and continued to reduce emissions. As a result, in this Supplemental Declaration I reaffirm my conclusions from prior declarations with updated monitoring data and emissions estimates. Second, my Remedy Declaration explained that I evaluated certain emission reduction projects in connection with the EPA's April 25, 2023, Proposed Rule for chloroprene ("Proposed Rule")¹ to illustrate the technical challenges with complying with EPA's Statement of Relief. Following my Remedy Declaration, EPA published its final rule for chloroprene on May 16, 2024 ("Final Rule").² This Supplemental Declaration explains that the minor changes between the Proposed Rule and Final Rule do not change my prior opinions.

Monitoring and Emission Data

3. Since filing my Remedy Declaration, I have continued to submit Method 325 and TO-15 monitoring results to EPA.

4. Based on updated monitoring data through January 2025, fence-line concentrations of chloroprene have averaged roughly 0.23 µg/m³ since February 2023. These concentration levels are consistent with the significant reductions in emissions implemented after DPE acquired the Facility and entered the AOC with LDEQ, as well as the significant additional reductions in emissions achieved by measures identified, tested and implemented at the Facility by DPE in 2023 and 2024.

¹ 88 Fed. Reg. 25080 (Apr. 25, 2023).

² 89 Fed. Reg. 42932 (May 16, 2024).

5. In light of the significant emission reduction measures implemented at the Facility, DPE's annual emission inventory estimate for chloroprene has continued to decrease. In April 2024, I submitted to the Louisiana Department of Environmental Quality an updated emission inventory that estimates annual chloroprene emissions from the Facility are approximately 13.0 tons per year, down from approximately 19.2 tons in 2022, the most recent annual estimate at the time of my Remedy Declaration, and approximately 128.8 tons in 2014, prior to DPE purchasing the Facility. While we have not yet finalized our emission inventory estimate for chloroprene emissions in 2024, my initial estimates suggest that chloroprene emissions were less than 12 tons in the prior calendar year. I expect to have finalized this estimate prior to the scheduled trial date of April 14, 2025.

6. Despite the continued reductions in chloroprene emissions, EPA's Statement of Final Relief would still require emission reductions well below current operating levels.

Final Rule

7. As explained in my prior declarations, DPE evaluated the emission reduction projects ("ERPs") required by the Proposed Rule. The series of ERPs required by the Proposed Rule, if actually implemented, would be insufficient to comply with the requirements of EPA's proposed Statement of Final Relief, but they provided a set of tangible requirements that DPE could evaluate to assess technical feasibility and cost. On May 16, 2024, EPA published the Final Rule. Although there are some changes to the chloroprene requirements between the Proposed Rule and Final Rule, they are largely insignificant and do not change my opinion that EPA's statement of Final Relief is infeasible and potentially impossible. *See* Remedy Declaration ¶ 10.

8. In my prior declarations I detailed how the requirements of the Proposed Rule: (1) were not expected to reduce current ambient chloroprene concentrations to the level that would

allow DPE to comply with either the concentration limits required by the Proposed Rule or in EPA's proposed Statement of Final Relief, and (2) would take years to design, install, perform pre-start-up safety reviews, and start up, plus the additional time to make the demonstration.

9. Based on my review of the Final Rule, there are no major changes to the scope of the ERPs from the Proposed Rule.³ Accordingly, the technical analyses submitted with the DPE Comments to the Proposed Rule remain applicable for understanding the Final Rule requirements in relation to EPA's Statement of Final Relief.

10. The Final Rule requires emissions from process vents and storage vessels in chloroprene service to be routed to a closed vent system to a non-flare control device that reduces chloroprene by greater or equal to 98% destruction removal efficiency ("DRE"). The Proposed Rule proposed a 99% DRE which would have required replacing the Facility's existing regenerative thermal oxidizer which only has a 98% DRE. However, the flow capacity limitations still remain an issue. As explained in my Remedy Declaration, the sources identified by EPA that would need to be routed to a thermal oxidizer would require an increase in flow rates of over 4.3 times the current flow capacity of the existing thermal oxidizer. Remedy Declaration ¶ 30, Exhibit A at Slide 8. Therefore, an additional thermal oxidizer would still need to be installed at the Facility to comply with the Final Rule requirements.

³ Perhaps the biggest change in the Final Rule is the shortening of the compliance deadline from 2 years to 90 days for implementation of the required Section 112(f) ERPs. While this compliance deadline is not possible, it does not alter my prior analysis for how long such ERPs would take to implement.

11. Additionally, the Final Rule instructs that the only viable way to capture chloroprene emissions from the identified sources and route them to a thermal oxidizer is to install three permanent total enclosures⁴:

- One permanent total enclosure for all five polymerization batch reactors;
- One permanent total enclosure for the two wash belt dryers; and
- One permanent total enclosure for the three emulsion storage tanks.

12. Although EPA indicated that there is no explicit requirement to install permanent total enclosures,⁵ I am not aware of an alternative option that can achieve the Final Rule requirements. Furthermore, such enclosures would likely be needed to achieve the emission levels demanded in the proposed Statement of Final Relief.

13. As the Environmental Affairs Manager for the Facility, I am extremely concerned that the Final Rule fails to account for the technical and process safety challenges of enclosing the wash belts and equipment in the poly building required to meet the Final Rule and Statement of Final Relief requirements. Capturing chloroprene from these areas is complex and will take time to plan and safely implement, especially considering capturing emissions from these areas involves sources that are not closely clustered at the Facility. In turn, these enclosures pose serious concerns regarding occupational exposure, human health and safety, process maintenance, and product quality. I am especially concerned with how an enclosure may impact safe ventilation in the finishing building and an industrial hygienist is needed to evaluate any changes to the airflow through the vent hoods themselves or in other areas of the finishing building to ensure compliance

⁴ See 89 Fed. Reg. at 42,986 (“we continue to stand by our analysis”); see also ERG Control options for Process Vents and Storage Vessels Memo at 7.

⁵ 89 Fed. Reg. at 42,987.

with personnel exposure requirements, or to make recommendations for additional protective equipment.

14. Safely implementing enclosures of this magnitude takes time. Based on my prior experience installing existing enclosures at the Facility, the process safety concerns, and the necessary design, review, and approval process, I estimate a period of at least two years—and more likely 30-36 months—would be required before such enclosures could be installed in tandem with the additionally required thermal oxidizer.

15. The rest of the ERPs previously evaluated following the Proposed Rule would still require the same costs and time previously estimated.

16. The requirements of the Final Rule do not alter my opinion that EPA's proposed Statement of Final Relief requires emission reductions that are not feasible and may be impossible. *See* Remedy Declaration ¶ 10.

17. I reserve the right to further supplement this Declaration.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 13, 2025.



CHRIS MEADOWS, D.E.