EXHIBIT 11

DECLARATION OF CHRISTOPHER MEYERS, P.E.

Pursuant to 28 U.S.C § 1746, I, Chris Meyers, declare as follows:

1. I am currently employed as the Environmental Affairs Manager for Denka Performance Elastomer, LLC (DPE). I have held this position at the Neoprene plant in LaPlace, Louisiana (the "Facility"), since June 3, 2022. I previously held the position of Environmental Permitting Specialist at DPE from June 28, 2016, to June 2, 2022. Prior to that, I held the position of Senior Consultant at Trinity Consultants where I was periodically engaged by DPE to advise on air permitting matters.

2. On April 9, 2024, EPA made public its final rule in docket EPA-HQ-OAR-2022-0730 ("Final Rule").[1] The Final Rule requires DPE to implement new emission controls at the Facility to comply with requirements issued under Section 112(f) ("Section 112(f) Control Projects") and provides only 90 days after the effective date for implementation. The 90-day compliance period for Section 112(f) Control Projects is eight times shorter than the compliance period contained in EPA's proposed rule ("Proposed Rule").[2] I am providing this declaration in support of DPE's Extension Request seeking at least a two-year compliance period for the Facility to safely design, install, and implement the Section 112(f) Control Projects.[3]

---

[1] *See* EPA, *New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry* (signed Mar. 28, 2024) (pre-publication version).

[2] *New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry*, 88 Fed. Reg. 25080 (Apr. 25, 2023), available at https://www.govinfo.gov/content/pkg/FR-2023-04-25/pdf/2023-07188.pdf.

[3] EPA has not yet published the Final Rule or otherwise made available to me the technical documents supporting its Final Rule. I reserve the right to supplement my declaration after

Summary of Opinions

3. Based on several years of intensive investigation by DPE assessing the prospect of reducing the emissions of chloroprene from DPE's Facility and my extensive experience safely planning and implementing emissions reduction projects ("ERPs") at the Facility, I am certain that the Section 112(f) Control Projects cannot be implemented within a 90-day compliance period. I offer the following specific opinions on this point:

- **Opinion 1**: Safely completing the Section 112(f) Control Projects at the Facility, including design and planning of the required modifications, capital approval, procurement and fabrication, installation, and testing of equipment, cannot be done in 90 days and will require at least two years.
- **Opinion 2**: A compliance period of less than two years would likely require a shutdown of the Facility and increase the complexity and dangers of implementing the requirements.
- **Opinion 3**: DPE has continued to reduce emissions through practicable, safe, and effective emissions reduction strategies since May 2022. DPE plans to continue to implement such strategies during the compliance period.
- **Opinion 4**: Section 112(f) Control Projects will impose significant capital and operating costs on the Facility and will require approvals and authorizations prior to initiating.

---

reviewing the technical documents, but I do not believe they would change my conclusion as to the feasibility of the 90-day compliance period.

Discussion

4. **Opinion 1: Safely completing the Section 112(f) Control Projects at the Facility, including design and planning of the required modifications, capital approval, procurement and fabrication, installation, and testing, cannot be done in 90 days and will require at least two years.**

5. I have led a significant effort, with the assistance of qualified, outside consultants, to evaluate many potential emission control projects at the Facility, including several of those necessary to comply with the Final Rule. DPE submitted comments ("DPE Comment(s)") to EPA's Proposed Rule on July 7, 2023, that incorporated the technical work of these outside consultants, including analysis memoranda and Excel workbooks.[4] Based on my review of the Final Rule, there are no major changes to the scope of the Section 112(f) Control Projects from the Proposed Rule. Accordingly, the technical analyses submitted with the DPE Comments are applicable for evaluating the Final Rule requirements.[5] Following the submittal of the DPE Comments, DPE has continued to evaluate other ERPs including emission capture and control for the wash belts in the "Finishing Area," batch reactor vessels (Poly Kettles) and stripper strainers, wastewater streams in the Polymer Area, and certain site maintenance activities; as well as modifications/improvements to the leak detection and repair program and the existing regenerative thermal oxidizer (RTO) to further reduce emissions. The extensive analyses performed by DPE and outside consultants are based on reviews of the Proposed Rule and associated technical

[4] The memoranda covered: thermal oxidizer; wastewater; PRDs; flares; dioxins and furans; and cost-benefits review.

[5] One control project that is no longer needed is a replacement for DPE's existing thermal oxidizer. Under the Proposed Rule, DPE would have been required to operate a thermal oxidizer with a destruction efficiency of 99.9%, an efficiency beyond the capabilities of its current equipment. Nevertheless, I believe that the thermal oxidizer analysis performed by DPE personnel and its contractors remains applicable to investigating, designing, constructing, and testing the new thermal oxidizer which will still be required to meet the Final Rule requirements.

documents, third-party vendor quotes for emission control equipment, extensive emissions control experience, and Facility site visits, many of which I personally led.

6. As the Environmental Affairs Manager of a complex chemical manufacturing facility, after reviewing the extensive analyses by DPE personnel and outside consultants, I have serious concerns regarding the numerous complex process changes that will be required at the Facility for the installation of the Section 112(f) Control Projects. Chloroprene is a highly volatile, flammable, and highly reactive (polymeric) chemical. In turn, any changes to the production process at the Facility will require properly trained and knowledgeable employees and contractors with process safety experience. Failure to follow process safety procedures can result in disastrous consequences such as fires, explosions, and fatalities, as well as unintended environmental releases. Probability of incidents such as these is increased by stressors such as human error and omissions which are more likely to happen if new complex safety processes are implemented on an accelerated timeline, as is required in the Final Rule. Avoiding the consequences associated with potential chloroprene-related process safety failures will demand careful planning and sufficient time to develop, assess, and implement the appropriate procedures required to safely operate the Section 112(f) Control Projects.

7. As the Environmental Affairs Manager, I have substantial concerns that the design, installation, and testing of the major projects required to comply with the Final Rule, combined with the requirement to complete these projects in a 90-day or even a two-year window, will encourage personnel to rush standard industry processes and practices, and increase the probability of human error. Circumvention of these standard processes and practices can easily result in a violation of the Occupational Safety and Health Administration's (OSHA) Process Safety Management requirements, serious injury or death to employees, and increased risk of community

exposure due to an environmental release incident. As explained in the DPE Comments, an insufficient compliance period unsafely ignores the potential for human error that can arise in (1) designing processes; (2) engineering projects; (3) specifying process components; (4) predicting safeguards necessary to control risk to an acceptable level and sustain the required safeguards for the life of the process; (5) managing process changes; (6) startup testing; and (7) trouble-shooting (shakedown) physical process changes.[6] In its Final Rule, EPA has still not addressed process safety actions or demonstrated that sound change-management principles were used in developing the required Section 112(f) Control Projects. EPA's demand for compliance on such an unreasonable schedule poses serious risks to DPE, its employees, and the surrounding community.

8. I have reviewed the requirements of the Final Rule in relation to the Section 112(f) Control Projects. As detailed further below, none of these projects can be feasibly or safely implemented in only 90 days, let alone all of them simultaneously.

9. **Thermal Oxidizer**. 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).[7] As EPA concluded, this requires routing of all chloroprene emissions from the polymer batch reactors, emulsion storage vessels, strainers, and wash belt dryers to a thermal oxidizer (TO).[8]

---

[6] DPE Comment at 108.
[7] Final Rule at 19-20.
[8] 88 Fed. Reg. at 25117; *see* ERG Control Options for Process Vents and Storage Vessels Memo at 7. *See also* Final Rule at 196-97 (EPA has reiterated in the Final Rule that it "continue[s] to stand by [their] analysis" and finalized control requirements for those same sources.).

10. The Facility currently has an RTO with a DRE of approximately 98% and a flow capacity of 58,500 scfm.[9] However, the sources identified by EPA that would need to be routed to a TO would add 210,558 scfm of flow, resulting in a new total flow of 252,869 scfm.[10] The additional flows are more than 4.3 times higher than the Facility's existing RTO flow capacity. In other words, the Final Rule requires the installation of a new, much larger TO at the Facility to control the excess flow from process vents and storage vessels in chloroprene service. EPA has acknowledged that the Facility will need to install an additional thermal oxidizer to comply with the Final Rule.[11]

11. Based on my prior experience with the installation of emission controls, including the first RTO installation at the Facility, and evaluation work already completed by DPE in relation to an additional TO, I would expect that DPE will need *at least* two years to safely design, obtain approvals for, complete construction, install, and test a new TO with a much larger flow capacity. My estimated timeframe does not account for testing to determine the applicability of the dioxins and furans standard[12] that must be understood before finalizing the planning of the TO. If the dioxins and furans standard is also determined to be applicable, additional time will be needed at the Facility to account for such standards in the design and construction of a TO.

---

[9] Presentation to EPA (Oct. 18, 2023) ("DPE Presentation") at Slide 8; Norton Thermal Oxidizer Memo at 5-6; *see also* Declaration of Chrisopher Meyers submitted in *United States v. Denka Performance Elastomer, LLC*, Case No. 2:23-cv-00735, regarding the remedy demanded by EPA ("Meyers Remedy Decl."), ¶¶ 27, 29.

[10] Meyers Remedy Decl., ¶ 30 and Exhibit A; *see also* Norton Thermal Oxidizer Memo at 5-6.

[11] Final Rule at 198 (EPA "anticipate[s] that the facility will still need to install an additional thermal oxidizer in order to comply with the final performance standard for process vents and storage vessels in chloroprene service.").

[12] Final Rule at 20-21; 152.

12. EPA's Final Rule instructs that the only viable way to capture chloroprene emissions from the identified sources and route them to a TO is to install three permanent total enclosures (PTEs):[13]

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

13. Although EPA indicated that there is no explicit requirement to install PTEs,[14] I am not aware of an alternative option that can achieve the Final Rule requirements. 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 new standards. 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. For example, the wash belts are located in the finishing building, which is separate from the poly building, however, EPA had claimed they were in the same building in the Proposed Rule. Although EPA purports to acknowledge this burden in the Final Rule,[15] it does not appear to me that EPA has given any meaningful, let alone adequate, consideration of the physical layout or technical limitations of the Facility's equipment when requiring that emissions be captured.

---

[13] *See* Final Rule at 196-97 ("we continue to stand by our analysis"); *see also* ERG Control Options for Process Vents and Storage Vessels Memo at 7.
[14] Final Rule at 198-199
[15] *See* Final Rule at 198 (acknowledging that the wash belts are located in the finishing building rather than polymer building but reiterating that they still must be controlled under the Final Rule and that an additional TO is likely required).

14. The enclosures that will likely be necessary to comply with the Final Rule pose serious concerns regarding occupational exposure, human health and safety, process maintenance, and product quality associated with enclosing the wash belts at the Facility. I am especially concerned with how an enclosure may impact safe ventilation in the finishing building. DPE's wash belt blower motors are equipped with variable frequency drives that allow a reduction of the total flow rate through the vents. 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 with personnel exposure requirements, or to make recommendations for additional protective equipment. I also note that changes in airflow from enclosing the wash belts can negatively impact product quality, which also needs to be evaluated before enclosures are permanently installed.

15. Enclosing the wash belts also poses maintenance and repair considerations that concern me as an Environmental Affairs Manager. The wash belts require frequent manual intervention from DPE personnel to ensure stable operation. This requires physical access to the equipment to complete maintenance and repairs. As a result, I believe it is likely that any enclosures will need to be transparent and capable of easily and frequently being dissembled and reassembled.

16. 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 the new, much larger TO could commence operation and safely control emissions from the enclosures at the Facility. DPE's existing RTO and Monomer Emissions Reduction Project (MERP) control systems took nearly two years to design, approve, install, test, and place into service. The existing

RTO controls the higher concentration flows at the Facility — meaning that the Facility will face more challenges associated with capturing the more diffused sources and routing them to the new TO. Also, nearly two years of work was done by DPE on an accelerated schedule to meet the requirements of the January 2017 Administrative Order on Consent. Based on that experience and the dangerous risks that were revealed during the accelerated nearly two-year process, I would not authorize a similar accelerated implementation schedule for a new, much larger and more complicated TO. I believe the risk inherent in attempting to complete such a task in only 90 days is unthinkable. Additionally, after DPE completed work on the existing RTO and MERP control systems, the new systems did not function effectively upon startup and required several months of shakedown and then over a year of process optimization before they were considered fully successful. Based on this prior experience alone, I estimate that the Facility would require at least 30-36 months to complete another TO.

17. **Safety Bypass Lines**. I am also very concerned with EPA's prohibition of the use of bypass lines that would prevent the Facility from bypassing control devices without incurring a potentially enforceable permit violation. The Final Rule will require monitoring systems for flow on bypass lines to detect whether vent stream flow is present every 15 minutes and to estimate and report any releases.[16] A unqualified prohibition is alarming because bypass lines are critical process safety devices used to prevent an explosive mixture of gases from accumulating within the header systems connected to the RTO and avoid catastrophic failure. These bypass lines cannot be fully eliminated—without these bypass lines there is nowhere else for these dangerous vapor streams to go. I am concerned that use of the bypass lines for their intended process safety purpose

[16] Final Rule at 68, 336, 690.

will result in excess violations of appliable emission standards. Accordingly, the design of the new TO must consider the possibility of routing certain bypass lines to the TO.

18. The Facility has four closed vent systems to route process emissions from the Neoprene process area to the RTO: (1) a nitrogen-rich header for streams with high chloroprene concentrations; (2) an air rich header for streams with lower chloroprene concentrations; (3) the East Hot Dryer Vent; and (4) the West Hot Dryer Vent. The Facility's MERP is also a closed vent system which routes emissions from the monomer process area to the Halogen Acid Production Furnace (HAPF). In total, there are 19 bypass lines associated with the RTO and 8 bypass lines associated with the MERP that are required for safety reasons. As the Facility's Environmental Affairs Manager, I can attest that these bypass lines are rarely used—and only for emergencies (emissions from bypass lines made up less than 1% of the Facility's total emissions in 2022). These bypass lines are critical safety equipment for the Facility with low emissions consequences.

19. DPE will need time to safely design, plan, and implement new configurations to handle these potentially catastrophic flows. This may require designing the new TO to accept these vent streams, regardless of how infrequently they occur, or require substantial reworking of piping and ducting to accommodate the instrumentation required to meet the new monitoring standards. In my opinion, addressing the unqualified prohibition on bypasses will contribute to the Facility's need for 30-36 months to achieve implementation of the TO.

20. **Dioxins and Furans Emission Limit**. DPE needs additional time to complete testing for the presence of dioxins and furans. Additionally, the dioxins and furans limit further complicates the designing, planning, and implementation of an additional TO because additional condenser equipment or other control devices must be evaluated concurrently with the chloroprene Section 112(f) Control Projects. EPA's dioxins and furans technical support document assumed

that a condenser would be installed prior to the existing control device, which in DPE's case is a thermal oxidizer.[17] Based on the analysis performed by DPE's consultants,[18] DPE would have to evaluate commercially available refrigeration systems that can achieve the temperatures required to recover or condense chloroprene out of the vapor streams. This evaluation would only be the first step towards compliance and there is no guarantee that it would provide a feasible option that meets the requirements of the Final Rule. If a feasible option is identified, it will take months to design, approve, install, and test such an option. If a feasible option is not identified, then the Facility will likely need to install and/or route the emissions to a new control device. Either option will significantly add to the time and complexity needed to implement the Section 112(f) Control Projects.

21. **Wastewater Steam Stripper**. The Final Rule requires wastewater streams that are in chloroprene service to comply with the requirements for Group 1 wastewater streams. This will likely necessitate the installation of a steam stripper to achieve reduction of chloroprene emissions from wastewater in chloroprene service.[19]

---

[17] ERG, *Dioxins and Furans MACT Floor in the SOCMI Source Category for Processes Subject to HON and Processes Subject to Group I and Group II Polymers and Resins NESHAPs* (Mar. 2023) ("ERG Dioxins and Furans Memo"), Table 11 (costs based on refrigeration condenser technology that has been applied in the PVC industry).

[18] *See* Montrose, *Dioxins and Furans Proposed Rules* (July 6, 2023). Montrose Environmental Group, Inc. ("Montrose") is a global environmental services provider specializing in emission control planning, measurement, and analysis, has worked closely with DPE over the past two years on nearly all aspects of potential options for chloroprene control at the Facility. Norton Engineering Consultants, Inc. ("Norton Engineering") is a consultant group with specialized expertise in thermal oxidizers has also assisted DPE in evaluating potential thermal oxidizer configurations and assisted Montrose in evaluating the dioxins and furans requirements proposed by EPA.

[19] Final Rule at 22, 99, 202.

22. DPE currently utilizes an air stripping system. This process occurs in the air sparging tank and routes to the onsite RTO.[20] However, as I previously discussed, the existing RTO does not have air flow capacity to take on additional waste streams, including chloroprene-containing air from a new steam stripper. Therefore, a new control device would need to be installed in addition to the new steam stripper to properly control the additional steam stripper wastewater streams at the Facility.

23. The Facility's current air stripping equipment and sparging tanks took more than 6 months to plan and implement, more than twice the 90 days EPA has given DPE to implement a new steam stripper system. And because steam stripping equipment is more complicated than air stripping equipment, it would take longer to safely plan, approve, install, test, and place steam stripping equipment into operation.

24. Based on my prior experience with the design and installation of wastewater control equipment at the Facility and evaluation work already completed by DPE personnel and outside consultants, I expect that the design, approvals, construction, installation, and testing of a new steam stripper together with a TO would take at least two years.

25. **Equipment to Limit Maintenance Emissions to 1 tpy**. The Final Rule imposes a 1 tpy cap on maintenance vent emission releases.[21] Despite significant efforts, DPE has not yet identified feasible options for achieving this requirement.

26. The largest single source of emissions from maintenance activities is from annual steaming of the Facility's 2mmlb tank (approximately 660 lbs of emission associated with each

[20] Also note that the Facility uses an outdoor brine pit to control steam stripper rundown streams which are then routed to the WWTP and subject to biological control that achieves 80% reduction.
[21] Final Rule at 20-21, 1168-69, 1175-76.

annual steam event). DPE has considered various options, but none of them have been viable.[22] First, based on discussions with EPA enforcement officials, DPE requested proposals from third-party vendors for the use of a portable TO for use during steam cleanings of the 2mmlb tank. However, two of the EPA-recommended vendors declined to submit proposals due to technical challenges and/or lack of available engineering resources. One vendor did submit a proposal but failed to properly evaluate safety considerations such as the use of the TO with HCl scrubbing equipment and required heat exchanger equipment that would be necessary due to elevated temperatures from the steaming process. Attempting to apply this proposed method on other tanks would pose similar issues.[23]

27. The Facility also considered using a new portable condenser and catch tank that would route steam vapors to an RTO for control. Unfortunately, this method would likely extend the length of plant turnaround times by unknown amounts of time with enormous costs.[24]

28. DPE also considered nitrogen purging of the 2mmlb tank in which vapors would be routed to an RTO for control. However, this purging process would take multiple days longer than the current steaming process posing immense cost-per-day consequences.[25] At this time, I am still not certain how many days it would take to use this option each cleaning.

29. DPE requires substantially more time to adequately assess solutions to this new maintenance emissions cap. Based on the substantial analysis and investigation already committed to this requirement, I estimate that DPE would need two years or more to evaluate, acquire

[22] *See, e.g.*, DPE Comment at 88-89.
[23] *Id.*
[24] *Id.*
[25] *Id.*

equipment, test, obtain approval, and implement any new maintenance activity processes to comply with the new standard.

30. **Other Section 112(d) requirements will increase the time needed to implement the Section 112(f) Control Projects**. The Section 112(f) Control Projects are not the only projects that I, or the Facility, must evaluate and implement within timeframes prescribed in the Final Rule. In addition to the Section 112(f) Control projects, DPE will be required to plan for the implementation of Section 112(d) requirements of the Final Rule. The engineer members of DPE's ERP Task Force must also consider any potential impacts of the Section 112(d) projects when planning, designing, and implementing the Section 112(f) Control Projects.

31. DPE personnel will need to account for the Section 112(d) requirements in planning the Section 112(f) Control Projects which further contributes to the need for at least two years for safe implementation of the Section 112(f) Control Projects.

32. **Opinion 2: A compliance period of less than two years would likely require a shutdown of the Facility and increase the complexity and dangers of implementing the requirements.**

33. As discussed above, Section 112(f) Control Projects cannot be technically or safely designed, approved, constructed, and tested at the Facility in less than two years. The extensive analysis performed by DPE and its outside experts demonstrates that anything less than two years is infeasible and unsafe.[26] If DPE is not provided at least two years to complete the Section 112(f)

[26] I also note that EPA's timing estimates for emission controls in the Section 303 Litigation also demonstrate that a 90-day compliance period for the Final Rule is infeasible. I explained in a prior declaration submitted in response to EPA's March 2023 preliminary injunction motion in the Section 303 Litigation (Case No. 2:23-cv-00735) ("Meyers PI Decl."), why ERP implementation timelines put forth in EPA's preliminary injunction motion were dramatically underestimated, infeasible, and failed to consider safety. Nevertheless, the timelines put forth in EPA's injunctive relief at that time determined that 90 days is an insufficient period to comply with the proposed

Control Projects, in my opinion, the Final Rule will require the Facility to shutdown thereby increasing the complexity and dangers of complying with the requirements of the Final Rule.

34. If DPE is not provided at least two years to complete the Section 112(f) Control Projects, as Environmental Affairs Manager, I fully expect that the Facility will need to immediately shift its attention, time, and resources toward completing a safe and effective shutdown of the Facility for an indefinite period of time. This comes at the cost of planning successful implementation of EPA's Final Rule requirements.

35. Once the shutdown occurs, DPE will be unable to field test the effectiveness of any emission reduction projects in a functional, operational setting. This prevents me or other DPE personnel from evaluating effective methods to address potential process safety hazards. In order to evaluate the effectiveness and safety of both large- and small-scale ERPs, DPE requires an operational facility. DPE already faces process hazard challenges during normal operations when evaluating emission reduction projects on accelerated timelines and a shutdown would just pose further challenges. Also, I am concerned about an indefinite shutdown's impact on the allocation of process safety resources and personnel. Additionally, I have serious concerns about the ability of DPE to maintain its personnel if DPE were forced to meet an unreasonable and infeasible compliance deadline of 90 days.

36. Lastly, as Environmental Affairs Manager, I am not aware of a single time in the plant's history in which DPE was required to restart operations after a prolonged shutdown of 3-6 months or longer. A shutdown here would last significantly longer due to the time needed to safely

---

requirements in EPA's Proposed Rule, which are substantially similar to the requirements of the Final Rule. For example, EPA's expert opined that it would take 90 days or more just to plan certain projects, let alone fully implement them. It is unreasonable for EPA to now demand compliance timeframes that are shorter than what EPA already represented to the district court were necessary.

develop and implement the Section 112(f) Control Projects. Therefore, significant process safety steps will need to be developed before a restart. This includes drafting, reviewing, and finalizing safety procedures for any restart that follows a prolonged period of non-use. Obviously, installing the Section 112(f) Control Projects from an idled state will impact the amount of time necessary to comply with the Final Rule and I fully expect that it would take at least two years to shutdown the Facility, install such projects, and restart operations.

37. **Opinion 3: DPE has continued to reduce emissions through practicable and effective emission reduction strategies since May 2022. DPE plans to continue to implement such strategies during the compliance period.**

38. DPE has and continues to evaluate emission reduction opportunities at the Facility. Between 2016 and 2018, DPE reduced the Facility's emissions by 85%. This was in large part due to the installation of the Facility's current RTO. Since May 2022, I have continued to lead efforts to reduce emissions and the Facility has implemented a series of additional reduction strategies. Many of these strategies are completely voluntary.

39. As Environmental Affairs Manager, I have overseen a number of these reduction efforts, which are discussed below:

- DPE has implemented a process to reduce emissions associated with waste from the Facility's poly kettle production units consistent with the requirements of the consent agreement in EPA Docket No. RCRA-06-2023-0906, as well as applying a similar process to waste coagulant generated from the stripper strainers. DPE now steams the coagulant and routes emissions to the RTO. DPE has also improved its washing and nitrogen purging processes to further reduce emissions associated with the poly kettle production units.
- DPE has implemented a voluntary process to reduce the number of concurrently operating unstripped emulsion storage tanks and to strip chloroprene from in-tank coagulant during maintenance of the unstripped emulsion storage tanks. Now only two tanks are used at a time to reduce coagulate formation. The tanks containing coagulate are filled with water and are circulated to strip the remaining chloroprene and route emissions to the RTO.

- The Facility has also employed a voluntary process to strip chloroprene from in-tank coagulant during maintenance of the five poly kettles.
- DPE has voluntarily decreased the site-wide leak detection and repair threshold from the regulatory standard of 500 ppm organic vapor concentration to 250 ppm. In conjunction with this new 250 ppm threshold hold, an additional voluntary process to screen certain components in the polymerization building located at the Facility and the 1236 waste organics storage tank area multiple times each week and to schedule repairs if leaking components are identified has been rolled out. DPE hired an LDAR technician with over 20 years of experience to lead these voluntary efforts which has included increased weekly screenings, new immediate repair procedures, and the purchase of state-of-the-art detection equipment.
- Furthermore, DPE has supplied operators in the polymers area with photoionization detectors (PIDs) to perform LDAR screenings on any component at any time to detect leaks. Accordingly, prompt repairs are made when leaks are detected.
- DPE voluntarily implemented a process requiring transfers of chloroprene-containing wastes from the chloroprene heels tank to the waste organics tanks in the HCl recovery unit process area be performed only when the 1236 tank system is connected to the MERP control system or other form of emissions control.
- DPE instituted new outdoor brine pit (OBP) management measures which require coagulant from the unstripped emulsion storage tanks and large poly kettles to be placed directly into plastic drums to be sent off-site for incineration. This new process change ensures that solid material is no longer placed in the OBP.

40. In addition, DPE is currently evaluating additional ERPs such as (i) a potential project to remove chloroprene from the poly kettle strainer waste by circulating water through the strainer and sparging the water in a closed vessel connected to the existing RTO, and (ii) the potential use of Forward Looking Infrared, or FLIR, cameras to improve leak detection activities.

41. I have been involved in reviewing the Facility's Method 325B and Method TO-15 data which demonstrates that the voluntary ERPs discussed above have resulted in quantified reductions of chloroprene concentrations near the Facility. Moreover, the Facility has achieved the lowest average chloroprene concentrations during my tenure following these voluntary changes.

42. **Opinion 4: Section 112(f) Control Projects will impose significant capital and operating costs on the Facility and will require approvals and authorizations prior to initiating.**

43. Section 112(f) Control Projects impose significant capital and operating costs that pose further challenges for obtaining necessary approvals to install. As part of DPE's review of the Proposed Rule, including with the input of outside consultants, DPE developed cost estimates for implementing the required control projects. Because the requirements in the Final Rule are substantially similar to those in the Proposed Rule, I believe that cost estimates previously developed remain accurate for the emission reduction projects necessary under the Final Rule. DPE is still developing cost estimates for the required steam stripper equipment (which also must be routed to a TO) which will provide additional cost challenges to the approvals process.

44. As further described in DPE's Comments on the Proposed Rule, the following are cost estimates for various required ERPs:

- Direct-fired thermal oxidizer (+ recuperative heat exchanger + scrubber)[27] estimated to have total installed cost (± 50%) of $39 million;
- Complying with maintenance cap estimated to cost $500,000 to $1.5 million per day during cleaning process for the 2mmlb tank alone;
- New DFTO capable of complying with dioxins and furans limit estimated to cost up to $58.5 million;
- Conservative estimate to install required number of IO points exceeds $4.6 million and does not account for the costs to implement magnetic sensors or motion detectors;
- Installation of new flare equipment has estimated cost (· 50%) of $2.06 million;

[27] DPE consultants developed cost estimates to implement a direct-fired thermal oxidizer based on the proposed requirement to achieve 99.9% DRE in the Proposed Rule.

- LDAR monitoring includes an additional estimated total cost of $5.15 million with an annualized cost of $340,000;

- Fenceline monitoring equipment estimated to cost an additional $3.0 million with an annualized cost of $200,000.

45. Note that these cost estimates are significantly greater than what EPA provided in both the Proposed Rule. As explained by DPE's expert consultants and based on my experience with purchasing, installing, and implementing control equipment at the Facility, in my opinion, the following EPA estimates are not accurate:

- $560,000 in capital costs and $330,000 in annualized costs for a condenser to comply with dioxins and furans limit (assumes infeasible refrigeration system is used rather than additional TO);

- $5.84 million total capital investment and $7.56 million in annualized costs for a wastewater steam stripper;

- $5 million in equipment costs for a thermal oxidizer with total installed costs at $10.1 million.

46. I reserve the right to further supplement this Declaration as I am given a more opportunity to study EPA's Final Rule requirements and supporting technical documents, and any further responses or information from EPA.

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

Executed on July 26, 2024

CHRIS MEYERS, P.E.