### **DECLARATION OF DIANE WILSON**

I, Diane Wilson, declare as follows:

1. The facts stated herein are personally known to me, and if called as a witness, I would and could competently testify thereto.

2. I am 74 years old, and I live in Seadrift, Texas.

3. I am the co-founder and Executive Director of San Antonio Bay Estuary ("SABE") Waterkeeper, which has been a volunteer-run, licensed Waterkeeper organization and a member of the national Waterkeeper Alliance since 2012.

4. As SABE Waterkeeper's Executive Director since 2012, I lead SABE Waterkeeper's mission to protect Lavaca Bay, Matagorda Bay, and San Antonio Bay and to educate the public about these ecologically important estuarine systems.

5. SABE Waterkeeper promotes the preservation of local wetlands and waterways for fishing and other recreational uses, such as swimming and other watersports, to further the appreciation of these beautiful natural resources. When necessary, I challenge polluters for permit violations in court. I also work to educate policymakers and the public about pollution and other challenges in Lavaca Bay, Matagorda Bay, and San Antonio Bay and the best practices to meet those challenges.

6. One of SABE Waterkeeper's key priorities is working to strengthen discharge permits to the San Antonio Bay and Matagorda Bay watershed in order to limit pollution and protect the waters' aquatic life and uses. As part of this work, SABE Waterkeeper is concerned that EPA's technology-based effluent limits are outdated and no longer reflect the best available technology.

7. I have spent 34 years fighting to protect Lavaca Bay, San Antonio Bay, and Matagorda Bay from industrial pollution and habitat degradation. Following in the footsteps of my parents and grandparents, I worked in Lavaca Bay, Matagorda Bay, and San Antonio Bay for forty years as a commercial fisherwoman, shrimper, oysterman, fin fisher, and as a manager at a fish house. Though I have retired from those professions, I continue to rely on the fishing trade in these bays as a net builder and mender in the shrimping industry.

8. The Bays not only support me financially. They are also precious to me. I care deeply about the aesthetic beauty and the environmental health of these Bays, wetlands, and shores, and the wildlife dependent on those resources. I frequently recreate in and around Lavaca, Matagorda, and San Antonio Bays including walking on the beaches, kayaking, and swimming with my family. I swim with my children and grandchildren in Matagorda Bay at Magnolia Beach.

9. SABE Waterkeeper seeks to restore fishing in Lavaca, Matagorda, and San Antonio Bays and support the families that depend on it. Matagorda Bay historically had a thriving fishing, shrimping, and oystering industry that has sharply declined in part due to industrial pollution. Despite the setbacks, the fishing community is fighting hard to survive. There are about 200 fishing families in Seadrift, Port O'Connor and Port Lavaca who depend on oyster and shrimp for their livelihoods.

10. Through SABE Waterkeeper, I also funded the Matagorda Bay Fishing Cooperative, an environmental project, that came from the citizen Clean Water lawsuit against Formosa Plastics in 2019. This sustainable and equitable project is dedicated to supporting fishing families in Matagorda, Lavaca, and San Antonio Bay Bay. I have also worked with Hispanic, Viet-

namese, and Anglo fisherfolk to restore and protect the bay ecosystem, revitalize the nearly decimated local seafood industry, and mitigate Formosa's plastics pollution and the cumulative effects of other industrial wastes.

11. Through my work as the Executive Director of SABE Waterkeeper, I am aware of pollution in Lavaca, Matagorda, and San Antonio Bays. In particular, I know that these areas receive a substantial amount of industrial pollution, including from Inorganic Chemicals Manufacturing; Organic Chemicals, Plastics, and Synthetic Fibers Manufacturing; Pesticides Chemicals Manufacturing; Petroleum Refining; Plastics Molding and Forming; and Nonferrous Metals Manufacturing.

12. I am also the founder and Executive Director of Calhoun County Resource Watch, a volunteer-run, 501(c)(3) nonprofit, since 1989.

13. Matagorda Bay is the third largest estuary on the Texas coast and rich in natural resources. Located on the Central Flyway, it is one of the most important bird habitats in North America and is home to numerous state and wildlife refuges. It is home to several species protected under the federal Endangered Species Act, including five species of sea turtle.

14. For generations, Matagorda Bay supported a thriving fishing economy. Industrial pollution in the Bay, among other things, has caused fishing harvests to fall, and fishing related employment has dropped.

15. Oyster reefs and seagrasses are both important aquatic habitats that support commercial and recreational fisheries in Lavaca and Matagorda Bays. Seagrass beds provide feeding and nursery habitat for numerous fish, shellfish, invertebrate, waterfowl and countless other species. Seagrass beds also reduce erosion and dampen the impacts of currents and waves on coastal

zones. Seagrass habitats in coastal Texas have been in decline due to pollution, habitat modification, and other causes, leading to significant state and federal expenditures to protect and restore them.

16. Oyster reefs are scattered throughout Matagorda Bay and provide habitat for commercially valuable shellfish and many other species. Reefs also attenuate wave energy and erosion, protecting other habitats. Like seagrass beds, oyster reefs have been in long-term decline in Matagorda Bay, leading to considerable efforts to protect and restore them.

17. In 2019, SABE Waterkeeper won a Clean Water Act citizen suit against Formosa Plastics for illegally dumping plastic pellets and powder into Lavaca Bay, based on thousands of physical samples and photos collected by SABE Waterkeeper's members. The suit led to a historic settlement, of which \$20 million was dedicated to developing sustainable fishing cooperatives to support and revitalize the local fishing industry.

18. Starting in 1948, the Aluminum Company of America ("Alcoa") aluminum refining/smelting facility in Matagorda Bay discharged mercury into the Bay. Since 1988, an area of Lavaca Bay has been closed to fishing because of high levels of mercury in finfish and crabs. Years of mercury contamination led EPA to designate the Alcoa Point Comfort/Lavaca Bay Superfund site on the National Priorities List in 1994. 59 Fed. Reg. 8794 (Feb. 23, 1994). EPA is overseeing ongoing remedial actions at the site to address mercury contamination, including long-term monitoring of sediments, fish, and crab.

19. The Lavaca Bay Ship Channel area is impaired for fish consumption use due to high levels of mercury.<sup>1</sup> TCEQ has advised visitors of Lavaca Bay to limit consumption of fish

<sup>&</sup>lt;sup>1</sup> U.S. EPA, *How's My Waterway—Lavaca Bay Ship Channel Area* <u>https://mywaterway.epa.gov/waterbody-report/TCEQMAIN/TX-2453D\_01</u> (last visited Mar. 31, 2023).

and crabs from the Bay due to high concentrations of mercury.<sup>2</sup> The Lavaca Bay Ship Channel area is also impaired for aquatic life use due to high levels of copper and depressed dissolved ox-ygen.

20. Brown, green, and red algae growth has plagued Lavaca Bay, San Antonio Bay, and Matagorda Bay many times during my lifetime. Fishing nets cannot be pulled in water with such bad algae growth, so the entire fishing community is affected whenever this happens. Many times, fishing has had to come to a complete halt because of these algae blooms, which seriously impacts the community's ability to function. During red algae blooms, many people in the community become sick. At one point, during the 2011-2012 season, there was such dire circumstances from the algae that Calhoun County was declared a disaster for the fishermen in our community when all bays were closed for fishing. With the oyster season unable to open for week after week, the oystermen sought assistance from elected officials and several counties wrote disaster declarations for the fishery, forwarding their proclamations to the Governor's office.

21. Since 1991, Texas has consistently produced the second-largest Eastern oyster crop in the United States. Texas is also considered a primary, nationwide supplier of both live oysters, products such as shucked meats available both fresh and frozen, and a variety of individually-quick-frozen (IQF) convenience products.

22. San Antonio Bay is the home bay of Seadrift, my hometown and where four generations of my fishing family have lived for 130 years. I began my life as a crabber on San Antonio Bay. In my 30's, I supported my five children by trot lining for catfish in Mission Bay. In my 40's I ran a fish house that had fourteen boats that worked San Antonio Bay.

<sup>&</sup>lt;sup>2</sup> Texas Parks and Wildlife, *Fish Consumption Bans and Advisories* <u>https://tpwd.texas.gov/regulations/outdoor-annual/fishing/general-rules-regulations/fish-consumption-bans-and-advisories</u> (last visited Mar. 31, 2023).

23. San Antonio Bay is impaired for oyster waters use due to high levels of bacteria.<sup>3</sup> TCEQ has also listed San Antonio Bay as waterbody with concerns due to high levels of Chlorophyll-*a*, which measures the amount of algae growing in a waterbody that may be caused by nutrient pollution from industrial sources.<sup>4</sup>

24. I am deeply concerned that exposure to industrial pollution in the Bays could threaten my health and the health of members of SABE Waterkeeper, and this concern has fundamentally changed how I interact with the water.

25. The use and enjoyment of Lavaca Bay, Matagorda Bay, and San Antonio Bay by SABE Waterkeeper, our members, and myself has been injured by EPA's failure to update the technology-based effluent limits for the following industrial sectors so that they reflect the best available technology: Organic Chemicals, Plastics, and Synthetic Fibers (OCPFS) Manufacturing; Pesticides Chemicals Manufacturing; Inorganic Chemicals Manufacturing; Petroleum Refining; Plastics Molding and Forming; and Nonferrous Metals Manufacturing.

# Organic Chemicals, Plastics, and Synthetic Fibers (OCPFS)

26. The use and enjoyment of Lavaca Bay, Chocolate Bay, Cox Lake, and Cox Bay my SABE Waterkeeper, our members, and myself, has been injured by EPA's failure to update the technology-based effluent limits for OCPSF Manufacturing facilities, 40 CFR Part 414, so that they reflect the best available technology.

27. EPA has not revised or updated the OCPSF effluent limitation guidelines (ELGs) in any way since 1993. These limits do not include any controls on stormwater pollution, despite

<sup>&</sup>lt;sup>3</sup> 2022 Texas Integrated Report- Texas 303(d) List (Category 5) <u>https://www.tceq.texas.gov/downloads/water-quality/assessment/integrated-report-2022/2022-303d.pdf.</u>

<sup>&</sup>lt;sup>4</sup> U.S. EPA, *Indicators: Chlorophyll a*, <u>https://www.epa.gov/national-aquatic-resource-surveys/indicators-chlorophyll (</u>last visited Mar. 31, 2023).

evidence that stormwater from OCPSF facilities is likely to contain plastic pellets, flakes, and powders that contaminate nearby beaches and waterways.

28. The **Formosa Point Comfort Plant** is located at 201 Formosa Drive in Point Comfort, Texas. NPDES Permit No. TX0085570 (Jan. 1, 2020) at 1.

29. The Formosa Point Comfort Plant is a plastics and organic and inorganic chemicals manufacturing facility that discharges process wastewater, stormwater, and wastewater from other sources directly to Lavaca Bay/Chocolate Bay in Segment No. 2453 of the Bays and Estuaries. NPDES Permit No. TX0085570, at 1-2h. This facility has sixteen production units that produce plastic products, including small pellets. Formosa manufactures caustic soda; ethylene dichloride (EDC); vinyl chloride monomer (VCM); polyvinyl chloride (PVC) suspension resins; specialty polyvinyl chloride (SPVC) dispersion, blending, and copolymer resins; ethylene; ethylene glycol; high density polyethylene (HDPE); liner low density polyethylene (LLDPE); and polypropylene (PP).<sup>5</sup>

30. The Formosa Point Comfort Plant also discharges non-process area stormwater and wastewater from other sources to Cox Lake, then out to Cox Bay. NPDES Permit No. TX0085570, at 1, 2m-2o.

31. The Formosa Point Comfort plant is likely subject to the OCPSF ELGs and lacks updated technology-based effluent limits for OCPSF Manufacturing plants. The permit for this plant classifies the facility by Standard Industrial Classification (SIC) codes 2821 (plastics materials, synthetic resins, and nonvulcanizable elastomers), 2812 (alkalie and chlorine), and

<sup>&</sup>lt;sup>5</sup> Petition to Revise the Clean Water Act Effluent Limitation Guidelines and Standards for the Petro-Plastics Industry under the 40 CFR Part 419 Petroleum Refining Industrial Category (Cracking and Petrochemicals Subparts) and Part 414 Organic Chemicals, Plastics, and Synthetic Fibers Industrial Category ["Plastics ELG Petition"] (Jul. 23, 2019) <u>https://www.biologicaldiversity.org/campaigns/ocean\_plastics/pdfs/CWA-Petro-Plastics-Petition-to-EPA-6-</u> 23-19.pdf at 10.

2869 (industrial inorganic chemicals, not elsewhere classified). NPDES Permit No. TX0085570 at 1. Among others, the OCPSF ELGs apply to facilities under SIC codes 2821 and 2869. 40 CFR § 414.11(c).

32. EPA's 2020 nutrient study concluded that the OCPSF sector creates significant amounts of nitrogen and phosphorus.<sup>6</sup> But EPA has failed to update these limits for OCPSF facilities, so the Formosa Point Comfort Plant is allowed to discharge unlimited amounts of nitrogen and phosphorus. Nitrogen and phosphorus together can lead to algae blooms that harm drinking water supplies, aquatic life, and make waters unpleasant to boat, swim, or wade in. My use of the Lavaca Bay, Chocolate Bay, Cox Lake, and Cox Bay is significantly impaired because of these pollutants.

33. Without any ELGs to cover stormwater, the Formosa Point Comfort plant's permit does not include sufficient numeric limits for pollutants that may be in the plant's stormwater. The Formosa Point Comfort plant is permitted to discharge non-process area stormwater, hydrostatic test water, fire water, and wastewater from other sources from several outfalls. The permit only applies numeric limits for two or three pollutants at those outfalls—total organic carbon, oil and grease, and 1,2-Dichloroethane. NPDES Permit No. TX0085570 at 2m-20. The Formosa Point Comfort permit does not include numeric stormwater limits for pollutants associated with the manufacture of ethylene—like polycyclic aromatic compounds (PACs), and butadiene—or the manufacture of vinyl chloride—like chlorinated hydrocarbons, chloromethane, dioxin, and polychlorinated biphenyls (PCBs).<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> EPA's Review of Nutrients in Industrial Wastewater Discharge—DCN 08784 (Dec. 2020), EPA-HQ-OW-2018-0618-0659, available at <u>https://www.regulations.gov/document/EPA-HQ-OW-2018-0618-0659</u>.

<sup>&</sup>lt;sup>7</sup> *Plastics ELG Petition*, at 11.

34. If PACs, butadiene, chlorinated hydrocarbons, chloromethane, dioxin, PCBs, and other pollutants associated with the plastics, organic, and inorganic chemicals manufacturing facility are discharged to Lavaca Bay, Chocolate Bay, Cox Lake, and Cox Bay, they may harm water quality, aquatic life and recreational opportunities, which diminishes the use and enjoyment of these waters by SABE Waterkeeper, our members, and myself. Dioxins, including some PCBs, are highly toxic and can cause cancer, and can harm reproductive, developmental, and immune systems.<sup>8</sup>

35. In 2019, SABE Waterkeeper won a Clean Water Act citizen suit against Formosa Plastics for illegally dumping plastic pellets and powder into Lavaca Bay, based on thousands of physical samples and photos collected by SABE Waterkeeper's members, including myself. We succeeded in reaching a historic settlement that dedicated \$20 million to developing sustainable fishing cooperatives to support and revitalize the local fishing industry. Because of this settlement, we were able to form the Matagorda Bay Fishing Cooperative Committee, which is dedicated to supporting fishing families in Matagorda Bay. Those revitalization efforts are threatened by ongoing industrial pollution in Matagorda Bay, including from the Formosa plastics plant, that would harm fisheries' habitats, food sources, and other wildlife.

36. Fisher folks who have worked in Upper Lavaca Bay in the past have complained of the strange appearance of the shrimp with black heads and then the disappearance of shrimp. Trot liners have said they found repeated instances of apparent mutations, like exposed stomachs, on young Black Drum in Upper Lavaca Bay.

37. As part of my work with SABE Waterkeeper, I routinely visit Lavaca Bay, Matagorda Bay, and Cox Creek to observe whether plastics have been discharged from the Formosa

<sup>&</sup>lt;sup>8</sup> U.S. EPA, "Learn About Dioxin" <u>https://www.epa.gov/dioxin/learn-about-dioxin</u> (last visited Mar. 31, 2023).

Plastics facility. I also visit and inspect the areas that are being remediated for plastic contamination. I visit areas near Formosa's stormwater and wastewater outfalls and also upstream and downstream from the stormwater outfalls by kayak, motorboat, or on foot at least once a week and as frequently as three times a week. These trips typically last two to four hours. I began visiting many of these sites as early as January 2016 and will continue to visit them to monitor Formosa's compliance with the Consent Decree entered in *San Antonio Bay Estuarine Waterkeeper, et. al., v. Formosa Plastics, Texas et. al.*, No. 6:17-cv-00047 (S. D. Texas, Dec. 9, 2019).

38. In addition, there is a Phase 1 Remediation of Plastic on Cox Creek that began in November 2022 and will last approximately two years. This is a \$40 million project. Once the Remediation Phase for Lavaca/Matagorda Bay begins, it will last at least three-five years. I plan to visit these cleanup sites on Cox Creek, Lavaca Bay, and Matagorda Bay to view and approve the remediation of areas of concern.

### Pesticide Chemical Manufacturing

39. My use of the Lavaca-Guadalupe River Basin has been injured by EPA's failure to update the technology-based effluent limits for Pesticide Chemicals Manufacturing facilities, 40 CFR Part 455, so that they reflect the best available technology.

40. The INV Nylon Chemicals Americas, LLC Victoria Site, NPDES TX0006050, is located at 2695 Old Bloomington Road North, Victoria, Texas 77905.<sup>9</sup> The INV Nylon plant is a chemicals and plastics manufacturing facility. The plant discharges process wastewater, process-area stormwater, and wastewater from other sources to the Guadalupe River below the San Marcos River in Segment No. 1803 of the Guadalupe River Basin. NPDES Permit No.

<sup>&</sup>lt;sup>9</sup> U.S. EPA, *TRI Explorer: INV Nylon Chemicals America Victoria Site* https://enviro.epa.gov/triexplorer/release\_fac\_profile?TRI=77905NVSTS2695L&TRILIB=TRIQ1&V\_NA\_INDIC <u>ATOR=,&FLD=&FLD=RELLBY&FLD=TSFDSP&OFFDISPD=&OTHDISPD=&OTHOFFD=&YE</u> <u>AR=2017</u> (last visited Mar. 31, 2023).

TX0006050 at 1-2a. (Jun. 6, 2017). From here, the Guadalupe River flows out to the San Antonio Bay.

41. The INV chemical plant also discharges stormwater and wastewater from other non-process sources to the Victoria Barge Canal in Segment No. 1701 of the Lavaca-Guadalupe Coastal Basin. NPDES Permit No. TX0006050 at 1, 21-2u.

42. San Antonio Bay is the home bay of Seadrift, my hometown and where four generations of my fishing family have lived for 130 years. I began my life as a crabber on San Antonio Bay. In my 30's, I supported my five children by trot lining for catfish in Mission Bay. In my 40's I ran a fish house that had fourteen boats that worked San Antonio Bay.

43. The INV Nylon chemical plant is subject to ELGs for the OCPSF sector, 40 CFR Part 414, but it is likely that the pesticide manufacturing ELGs, 40 CFR Part 455, should also apply to this facility.

44. EPA's last update to the Pesticides Manufacturing ELGs occurred in 1998, and only affected one facility that manufactured a particular pesticide active ingredient. Before that, EPA's last update to these limits occurred in 1996. The pesticide manufacturing ELGs, Subpart A (Organic Pesticide Chemical Manufacturing) apply to plants that manufacture pesticide active ingredients (PAI) in Table 1 of the Pesticide Manufacturing ELGs. 40 CFR § 455.20(d). However, EPA has not updated the table of PAIs determining applicability since 1993. The list of 272 PAIs in the regulation represents the PAIs being manufactured in 1985 and 1986 that were not already regulated by the OCPSF ELGs.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> EPA. "Development Document for Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Pesticide Chemicals Manufacturing Point Source Category." September 1993. pp 3-3 to 3-4.<u>https://www.epa.gov/sites/default/files/2017-04/documents/pesticide-chemicals-mfg\_dd\_1993.pdf</u>

45. The INV Nylon chemical plant's permit includes a limit for at least one PAI— DNOC (4,6-dinitro-o-cresol). 40 CFR § 455 Table 1; NPDES Permit No. TX0006050 at 2f, 2j, 2m, 2p. If the INV Nylon Chemical plant manufactures DNOC, or any other PAIs listed in Table 1 of the ELGs, then the Organic Pesticide Chemical Manufacturing ELGs should also apply to that facility.

46. EPA has not updated the list of regulated PAIs in three decades, so the Pesticide Manufacturing ELGs likely do not include limits for dozens of new PAIs that have been developed since. Without an applicable Pesticide ELG, it is likely that facilities that manufacture newer pesticides will not be required monitor and limit their discharges under the Pesticide ELGs according to limits that reflect the best available technology.

47. Figuring out applicability of the Pesticide Manufacturing ELGs is far more complex than any of the other industries. I know that the Pesticide Chemicals ELGs are often not included in permits for companies that manufacture pesticides, and I believe that may be the case for the INV Nylon chemical plant. Because EPA is not regularly updating the Pesticide Manufacturing ELGs to include limits for newer pesticides, I believe that plants that manufacture pesticides are likely to be covered by even weaker limits for other sectors—like OCPSF Manufacturing—rather than the more relevant limits for the Pesticide Manufacturing sector.

48. The OCPSF Manufacturing ELGs apply only to process wastewater discharges, and do not limit stormwater discharges at all. 40 CFR Part 414.11(a). Contaminated stormwater, as well as other waste streams, are covered by Organic Pesticide Chemical Manufacturing ELGs. 40 CFR Part 455.21(d). Because EPA has never updated the Pesticide Manufacturing ELGs to limit certain pesticides, including DNOC, those pesticides are not limited in stormwater from facilities like the INV Nylon chemical plant under the OCPSF ELGs.

49. The INV Nylon chemical plant is permitted to discharge stormwater and wastewater from other non-process sources, which leads out to the Lavaca-Guadalupe Coastal Basin. NPDES Permit No. TX0006050 at 1. The plant's permit only includes numeric limits for five pollutants at two separate outfalls that discharge process-area stormwater. NPDES Permit No. TX0006050 at 2r-2t. A third outfall that discharges process-area stormwater only includes limits for ten pollutants. NPDES Permit No. TX0006050 at 2. The permit does not limit DNOC in any of these stormwater discharges, or any other pesticide active ingredients that may be manufactured at the plant.

### Inorganic Chemical Manufacturing

50. My use of Lavaca Bay has been injured by EPA's failure to update the technologybased effluent limits for Inorganic Chemicals Manufacturing facilities, 40 CFR Part 415, so that they reflect the best available technology.

51. The Alcoa World Alumina LLC's Alcoa Point Comfort Operations facility is located south of State Highway 35 from its intersection with Farm-to-Market Road 1593, west of Cox Creek, east of Lavaca Bay, and north of Cox Bay, near Point Comfort, Texas 77978. NPDES Permit No. TX0004715 at 1 (Jan. 13, 2022).

52. The Alcoa plant is an idle bauxite refining facility which formerly produced, and could resume production of, alumina, aluminum fluoride, and other aluminum oxide products. NPDES Permit No. TX0004715 at 1.

53. The Alcoa plant discharges bauxite refining process liquids, stormwater, and wastewater from several additional sources directly to Lavaca Bay in Segment No. 2453 of the Bays and Estuaries. NPDES Permit No. TX0004715 at 1-2s.

54. The Alcoa plant also discharges bauxite refining process liquids, stormwater, and wastewater from several additional sources to Cox Lake, which flows to Huisache Cove, which is part of Cox Bay. NPDES Permit No. TX0004715 at 1, 2t. At this outfall, the Alcoa permit only includes numeric limits for total organic carbon, oil and grease, and mercury.

55. The Alcoa plant also discharges bauxite refining process liquids, stormwater, and wastewater from several additional sources directly to Cox Bay in Segment No. 2454 of the Bays and Estuaries. NPDES Permit No. TX0004715 at 1, 2u-2v. The permit only includes numeric limits at these outfalls for total organic carbon, oil and grease, and mercury.

56. The Alcoa Point Comfort plant's permit includes limits from both the Inorganic Chemical Manufacturing ELGs, 40 CFR Part 415, and the Nonferrous Metals Manufacturing ELGs, 40 CFR Part 421. NPDES Permit No. TX0004715 at 1 (Jan. 13, 2022).

57. The Inorganic Chemical Manufacturing ELGs, 40 CFR Part 415, have not been updated in any way since 1984. In the 1982 rulemaking for the Inorganic Chemical Manufacturing ELGs, EPA rejected technologies that are now widely available and used as the basis for ELGs in other industries, like membrane processes and ion exchange. There was also evidence that facilities could achieve no discharge.

58. My use of the Lavaca Bay and Cox Bay is harmed by my uncertainty as to whether these unregulated pollutants of concern are in the wastewater from the Alcoa Point Comfort bauxite refining facility that I am unaware of. EPA has never once completed a detailed review of the inorganic chemical industry since it last updated the ELGs in 1984—almost four decades ago—to determine whether additional pollutants are being discharged by these facilities that may need ELGs. Because EPA has not evaluated this industry as a whole, I am concerned that the current ELGs fail to include any limits for many toxic pollutants that may be discharged

in the Alcoa Point Comfort wastewater and that may harm me and other members of the SABE Waterkeeper when we interact with the water.

59. When EPA last updated the Inorganic Chemical Manufacturing ELGs in 1984, EPA excluded a number of toxic pollutants from the ELGs. In 1984, EPA decided not to add Inorganic Chemical ELGs for mercury, cyanide, benzene, naphthalene, silver and over one hundred other pollutants because they were not detectable using analytical methods at that time or were only found "in trace amounts" and/or in amounts that were "too small to be effectively reduced by technologies known to the Administrator" in 1984. 49 Fed Reg. 33402, 33418 (Aug. 22, 1984).

60. Since 1984, EPA has not gone back to examine whether any of these unregulated pollutants are actually present and detectable in discharges from inorganic chemical facilities like the Alcoa Point Comfort plant using modern analytical methods. I am concerned that EPA has fallen so far behind on updating the list of pollutants with limits under the Inorganic Chemical ELGs.

## Nonferrous Metals Manufacturing

61. I am also harmed by EPA's failure to revise the Nonferrous Metals Manufacturing ELGs, 40 CFR Part 463, most of which have not been revised since the 1980s. None of the Nonferrous Metals Manufacturing ELGs include any limits for the contaminated stormwater streaming off Nonferrous Metals Manufacturing sites. My use of San Antonio Bay has been injured by EPA's failure to update these ELGs so that they reflect the best available technology.

62. The NPDES permit for the Alcoa World Alumina LLC's Alcoa Point Comfort Operations plant includes limits from the Nonferrous Metals Manufacturing ELGs, 40 CFR Part 421. NPDES Permit No. TX0004715 at 1 (Jan. 13, 2022). The ELGs that apply to this facility are

likely under Subcategory A of the Nonferrous Metal Manufacturing ELGs—Bauxite Refining. 40 CFR § 421.10. Because EPA has failed to update most of the Nonferrous Metals Manufacturing ELGs in over forty years, the limits that apply to this idle bauxite refining facility—which formerly produced, and could resume production of, alumina, aluminum fluoride, and other aluminum oxide products—are inadequate and likely do not reflect the best available technology to control water pollution from this plant.

63. EPA has only set Bauxite Refining limits under the Nonferrous Metals Manufacturing ELGs for process wastewater. These ELGs provide that "[t]here shall be no discharge of *process waste water pollutants* to navigable waters." 40 CFR § 421.13 (emphasis added). EPA has never set Nonferrous Metal Manufacturing ELGs that apply to stormwater from bauxite refining plants like the Alcoa Point Comfort facility.

64. The Alcoa Point Comfort plant is permitted to discharge stormwater from numerous outfalls. At each of these outfalls, the permit only applies numeric limits for a handful of pollutants. For example, the permit only includes numeric limits for total organic carbon (TOC), oil and grease, and mercury from outfall numbers 008-014, and 016, which all discharge stormwater from the idle bauxite refining plant. NPDES Permit No. TX0004715 at 2n-2t, 2v.

65. In 1985, EPA stated that effluent from bauxite refineries is "characterized by high pH and the presence of phenolic compounds." 50 Fed. Reg. 38276, 38281 (Sept. 20, 1985). But EPA has never revised the ELGs for this sector to add stormwater limits for phenolic compounds or any other toxic pollutants of concern from this industry.

66. This harms me because stormwater from the Nonferrous Metals Manufacturing sites is likely to contain significant levels of heavy metals.

67. The use and enjoyment of Lavaca Bay and Cox Bay by SABE Waterkeeper, our members, and myself is harmed by our uncertainty as to whether these unregulated pollutants of concern are in the stormwater from the Alcoa Point Comfort bauxite refining facility that I am unaware of. EPA has never once completed a detailed review of the Nonferrous Metals Manufacturing sector since it set the ELGs for the industry in 1985—almost four decades ago—to determine whether pollutants are being discharged by these facilities in stormwater that may need ELGs. Because EPA has not evaluated this industry as a whole, I am concerned that the current ELGs fail to include limits for many toxic pollutants that may be discharged in the Alcoa Point Comfort stormwater and that may harm me and other members of the SABE Waterkeeper when we interact with the water.

68. **Zinc Resources, LLC**, is building a facility in Victoria to recycle zinc furnace dust, which is considered hazardous, into zinc and iron products. The Zinc Resources Victoria site discharges to the Victoria Barge Canal, which connects downstream to the San Antonio Bay. The facility is classified as within the Nonferrous Metals Manufacturing point source category 40 CFR Part 421. It does not yet have a process water permit.

69. None of the Nonferrous Metals Manufacturing ELGs include any limits for the contaminated stormwater streaming off Nonferrous Metals Manufacturing sites. Stormwater off the Zinc Resources Victoria site is currently covered under the Texas industrial stormwater general permit, TXR05FQ81. This permit only has monitoring benchmarks and does not include any numeric limits on pollutants that may be in the plant's stormwater.

70. This harms me because stormwater from the Nonferrous Metals Manufacturing sites is likely to contain significant levels of heavy metals. For instance, stormwater runoff off the Alcoa Massena aluminum smelter contained large quantities of fluorine: 34 lb./day in May

2022, 12 lb./day in June 2022, and 7 lb./day in July 2022.<sup>11</sup> Stormwater off the Sebree, Kentucky Century Aluminum smelter contains significant amounts of zinc, nickel, and cadmium.<sup>12</sup> Stormwater off the former Horsehead Corporation Monaca zinc smelter in Beaver, Pennsylvania, was sampled in 2022 at: 4,000 mg/L zinc (the daily maximum aquatic life criteria is approximately 120 ug/L); 230 ug/L lead (the daily maximum aquatic life criteria is 65 ug/L); 32 ug/L in June 2022, more than 100 times EPA's human health criteria; and 36,000 ug/L aluminum (Texas's water quality standard is generally 991 ug/L).<sup>13</sup>

71. Moreover, once the Zinc Resources plant begins operation, it is likely to discharge process water to the Victoria Barge Canal, which connects downstream to the San Antonio Bay, or a publicly owned treatment works (POTW). EPA's failure to update and revise the Nonferrous Metals Manufacturing will then cause me further harm because the metals pollution in the San Antonio Bay will likely increase because the Nonferrous Metals Manufacturing ELGs and pretreatment standards do not adequately limit the metals and other pollution from the future Zinc Resources, LLC facility.

72. For instance, the Nonferrous Metals Manufacturing ELGs and pretreatment standards have a number of subcategories, but none of them include limits for Thallium. Thallium is a heavy metal and sometimes informally referred to as the deadliest element. It was banned in rodenticide in the 1960s because of unintentional poisonings. It is associated with zinc smelting. It presents acute risks to the gastrointestinal systems, among other biological functions.

<sup>&</sup>lt;sup>11</sup> U.S. EPA ECHO database—Pollutant Loading Report (DMR), Alcoa Massena Operations (West Plant), Massena, 13662 <u>https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2023&permit\_id=NY0001732</u> (last visited Mar. 31, 2023).

<sup>&</sup>lt;sup>12</sup> U.S. EPA ECHO database—Pollutant Loading Report (DMR), Century Aluminum Sebree LLC, Robards, 42452 <u>https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2023&permit\_id=KY0004278</u> (last visited Mar. 31, 2023).

<sup>&</sup>lt;sup>13</sup> U.S. EPA ECHO database—Pollutant Loading Report (DMR), Horsehead Corp Monaca Smelter, Monaca, 15061 <u>https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?permit\_id=PA0002208&year=2022</u> (last visited Mar. 31, 2023).

EPA's human health criteria for thallium is 0.24 ug/L and Texas's water quality standard for water and fish is 0.75 ug/L. 30 TAC § 307.6.

73. In addition, metals treatment has greatly improved since EPA established the Nonferrous Metals Manufacturing ELGs and pretreatment standards in the 1970s and 1980s. If EPA now applied the current best available technology to treat metals, it would likely lower the standards of performance for new sources (the limits that would apply to the new Zinc Resources plant), making them more protective.

#### **Plastic Molding and Forming**

74. The use and enjoyment of Lavaca River and Cox Bay by SABE Waterkeeper, our members, and myself has also been injured by EPA's failure to update the technology-based effluent limits for Plastic Molding and Forming facilities, 40 CFR Part 463, so that they reflect the best available technology.

75. The **Interplast Group Facility**, NPDES permit number TX0108405, is located at 101 Interplast Boulevard Highway 1593 in Lolita, Texas 77971.

76. This plastics plant discharges stormwater runoff and wastewater from other sources to Cox Creek, which flows out to Huisache Cove of Cox Bay. The plant's permit only includes numeric limits for this stormwater discharge for oil and grease, total organic carbon, chemical oxygen demand, and pH. NPDES Permit No. TX0108405 at 2b.

77. The plant also discharges contact cooling water, cooling tower blowdown, and wastewater from other sources to the Lavaca River Tidal in Segment No. 1601 of the Lavaca River Basin. The plant's permit only includes numeric limits for this discharge of pollution for oil and grease, biological oxygen demand (5-day), total suspended solids, copper, cyanide, zinc, and pH. NPDES Permit No. TX0108405 at 2.

78. The Interplast Group Facility is covered by the Plastics Molding and Forming ELGs, 40 CFR Part 463. NPDES Permit No. TX0108405 at 1.

79. EPA set the Plastics Molding and Forming ELGs in 1984 and has never revised them since. These limits only control four conventional pollutants in process wastewater— BOD5, oil and grease, total suspended solids, and pH—and do not apply to any toxic pollutants or any other wastestreams, including stormwater. In a 2020 nutrient report, EPA prioritized this sector for further investigation based on excessive nitrogen and phosphorous pollution,<sup>14</sup> but EPA has never set ELGs to control nutrient pollution from plastics molding and forming facilities.

80. If EPA were to update the Plastics Molding and Forming ELGs to limit additional pollutants that are likely to be in stormwater from this industry, including cyanide, zinc, copper, and total suspended solids, those limits would restrict pollution in stormwater from the Interplast Group Facility and improve my use and enjoyment of the Lavaca River and Cox Bay.

81. The use and enjoyment of Lavaca River and Cox Bay by SABE Waterkeeper, our members, and myself is also harmed by the uncertainty about whether there are unregulated pollutants of concern in the Interplast Group Facility's stormwater and wastewater discharges. EPA has never revised these limits since they were first set almost 40 years ago and EPA has never set any numeric limits for stormwater from the plastics molding and forming sector, so I am concerned that there are additional pollutants like toxics and nutrients, that are being discharged into the bays that we are unaware of.

## **Petroleum Refining**

82. The use and enjoyment of Lavaca-Guadalupe Coastal Basin and Matagorda Bay by SABE Waterkeeper, our members, and myself has also been injured by EPA's failure to

<sup>&</sup>lt;sup>14</sup> EPA's Review of Nutrients in Industrial Wastewater Discharge—DCN 08784 (Dec. 2020), EPA-HQ-OW-2018-0618-0659, available at <u>https://www.regulations.gov/document/EPA-HQ-OW-2018-0618-0659</u>.

update the technology-based effluent limits for Petroleum Refining facilities, 40 CFR Part 419, so that they reflect the best available technology.

83. The **Seadrift Coke Plant** is located at 8618 State Highway 185 North, southwest of Port Lavaca, in Calhoun County, Texas 77979. NPDES Permit No. TX0090948 (Sept. 11, 2020) at 1. This petroleum needle coke production and calcining facility discharges stormwater, domestic wastewater, cooling tower blowdown, boiler blowdown, dimineralizer wastewater, and treated drainage from the training grounds directly to the Victoria Barge Canal Tidal in Segment No. 1701 of the Lavaca-Guadalupe Coastal Basin. NPDES Permit No. TX0090948 at 1-2b. This facility is subject to the Petroleum Refining ELGs, 40 CFR Part 419.

84. There is also a new refinery planned for Matagorda County that will likely discharge into the Matagorda Bay. HIF USA, LLC's **HIF Matagorda eFuels Plant** also referred to as "Project Helix", is a proposed industrial-scale plant that would produce synthetic versions of methanol, liquefied petroleum gas, gasoline, and jet fuel.<sup>15</sup> The proposed plant would be located on the north side of Farm-to-Market Road 521 at the intersection of Farm-to-Market Road 521 and Farm-to-Market Road 358 Bieri Road, Bay City, Matagorda County, Texas 77414. Notice of Application and Preliminary Decision for an Air Quality Permit No. 169075 (Jan. 12, 2023).

85. EPA has not revised or updated the Petroleum Refining ELGs in any way since 1985. These ELGs apply to just ten pollutants in refinery process wastewater and include ineffective standards for contaminated stormwater that only apply when certain pollution thresholds are exceeded. EPA has never set national limits for many other toxic pollutants that refineries are known to release and that are toxic to human or aquatic life—including mercury,

<sup>&</sup>lt;sup>15</sup> Oil and Gas Watch, *HIF Matagorda eFuels Plant*, <u>https://oilandgaswatch.org/facility/4788</u> (last visited Mar. 31, 2023).

selenium, benzene, nickel, cyanide, and lead. Although EPA has set limits on ammonia, the Petroleum Refining ELGs do not restrict other nitrogen compounds like nitrites or nitrates. There are also no standards to restrict chlorides, sulfates, or other dissolved solids.

86. The Seadrift Coke plant's permit does not limits pollutants that are known to be in refinery process wastewater, like nitrate-nitrate, total nitrogen, phosphorus, arsenic, mercury, and nickel. NPDES Permit No. TX0090948.<sup>16</sup> Unlimited discharges of nitrogen and nitrate-nitrate can cause algae growth in the water that makes it unsafe to swim in the water, while also cutting off the oxygen supply for fish and shellfish. High levels of mercury, nickel, and arsenic are toxic to humans and aquatic life. Algae blooms plague Lavaca Bay. When they happen, this algae growth severely impacts the ability of our fishing industry to thrive. The red algae blooms also threaten the health of our community, because they make people sick.

87. The Seadrift Coke Plant's permit only includes numeric limits for chemical oxygen demand (COD) and oil and grease in the plant's stormwater discharge to the Lavaca-Guadalupe Tidal Basin. NPDES Permit No. TX0090948 at 2b. EPA set ELGs to restrict eight pollutants in contaminated stormwater from petroleum refineries, but those limits only apply when certain pollution thresholds are exceeded.<sup>17</sup> The Seadrift Coke Plant's permit lacks limits for these few pollutants with stormwater limits in the Petroleum Refining ELGs. NPDES Permit No. TX0090948.

88. But EPA has not updated the Petroleum Refining ELGs since 1985, so these ELGs are also missing stormwater limits for other pollutants that are known to be in refinery wastewater. The Seadrift Coke plant's permit is missing stormwater limits for pollutants like

 <sup>&</sup>lt;sup>16</sup> U.S. EPA, "Detailed Study of the Petroleum Refining Category – 2019 Report" at 5-2 (Set. 2019), <u>https://www.epa.gov/sites/default/files/2019-10/documents/petro-refining-elg-study-2019.pdf</u>.
<sup>17</sup> For example, 40 C.F.R. §§ 419.12(e), 419.13(f).

arsenic, cadmium, cyanide, mercury, nickel, nitrate-nitrate, total nitrogen, phosphorus, selenium, total dissolved solids (TDS).<sup>18</sup>

89. Selenium is toxic to fish and other aquatic life. Selenium can cause reproductive harm in animals and bioaccumulates and biomagnifies through the food chain, threatening birds and other creatures. Unlimited discharges of nitrogen, phosphorous, and nitrate-nitrate can cause algae growth in the water that makes it unsafe to swim in the water, while also cutting off the oxygen supply for fish and shellfish. High levels of mercury, nickel, cadmium, cyanide, and arsenic are toxic to humans and aquatic life. The enjoyment of Lavaca-Guadalupe Coastal Basin and Matagorda Bay by SABE Waterkeeper, our members, and myself is significantly impaired because of these toxics.

90. Once the HIF Matagorda eFuels plant begins discharging into Matagorda Bay, my use of that waterbody will also be harmed by additional toxic pollutants from that plant, due to EPA's failure to update the petroleum refining ELGs to include additional limits.

91. I am also concerned about PFAS from the Seadrift Coke plant and the HIF Matagorda eFuels plant. The Seadrift Coke Plant's permit does not include process water or stormwater limits for PFAS or even regular monitoring. But the California State Water Resources Control Board has found that refineries use PFAS for preventing evaporation of petroleum products in tanks, and improving the reliability of seals and hoses, among many other uses.<sup>19</sup> PFAS, a group of "forever chemicals," can be toxic to people and fish at low levels.

<sup>&</sup>lt;sup>18</sup> U.S. EPA, "Detailed Study of the Petroleum Refining Category – 2019 Report" at 5-2 (Set. 2019), <u>https://www.epa.gov/sites/default/files/2019-10/documents/petro-refining-elg-study-2019.pdf.</u>

<sup>&</sup>lt;sup>19</sup> California State Water Resources Control Board, Water Code Sections 13267 and 13383, "Order For The Determination of the Presence of Per- And Polyfluoroalkyl Substances at Bulk Fuel Storage Terminals and Refineries," March 12, 2021, <u>https://www.waterboards.ca.gov/pfas/docs/order\_wq2021-0006-dwq\_pfas.pdf</u>.

92. The use and enjoyment of the Lavaca-Guadalupe Coastal Basin by SABE Waterkeeper, our members, and myself is also harmed by my uncertainty as to whether there are unregulated pollutants of concern in the wastewater from the Seadrift Coke plant that we are unaware of. EPA's most recent review of the industry in 2019 limited to less than 20 pollutants of concern, did not include PFAS, and did not account for many of the unregulated toxic pollutants that may be discharged in refinery wastewater and that may harm me and my community when we interact with the water.

93. In sum, EPA's Final Plan 15 decisions not to update effluent limitation guidelines and for the OCPSF Manufacturing, Pesticides Chemicals Manufacturing, Inorganic Chemicals Manufacturing, Petroleum Refining, Plastics Molding and Forming; and Nonferrous Metals Manufacturing sectors harms my interests and the interests of other SABE Waterkeepers—and, thus, the interests of SABE Waterkeeper itself—by putting human health, threatened and endangered species, and the environment at risk. If EPA were forced to come into compliance with the requirements of the Clean Water Act, revisit its decisions, and issue updated effluent limitation guidelines these industrial point source categories, my injuries and the SABE Waterkeeper's injuries would be redressed.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 2, 2023, in Seadrift, Texas

jane leo, Sa

Diane Wilson