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**SUPERIOR COURT OF THE STATE OF CALIFORNIA**
**IN AND FOR THE COUNTY OF SAN DIEGO**

**The People of the State of California** and **The City of San Diego**,

Plaintiffs,

v.

**3M Co., Buckeye Fire Equipment Co., Carrier Global Corp., Kidde-Fenwal, Inc., Kidde PLC, Inc., Raytheon Technologies Corp., UTC Fire & Security Americas Corp., Chemguard, Inc., National Foam, Inc., Tyco Fire Products LP, AGC Chemicals Americas, Inc., Archroma U.S., Inc., Arkema, Inc., BASF Corp., Chemdesign Products, Inc., Chemicals Incorporated, The Chemours Co., The Chemours Co. FC, LLC, Clariant Corp., Corteva, Inc., DuPont De Nemours, Inc., E.I. Du Pont De Nemours And Co., Deepwater Chemicals, Inc., Dynax Corp.,** and **Does 1-100**, inclusive,

Defendants.

**Case No.:** 37-2022-00017958-CU-PO-CTL

**Complaint For Abatement & Damages**

1) **Public Nuisance – Abatement**
2) **Public Nuisance – Damages**
3) **Defective Design**
4) **Failure To Warn**
5) **Trespass**
6) **Negligence**

**-And-**

**Demand For Jury Trial**

The People of the State of California (the "People"), acting by and through San Diego City Attorney Mara W. Elliott, and the City of San Diego (the "City" and, together with the People, "Plaintiffs"), hereby allege as follows:

## I. INTRODUCTION

1. Per- and polyfluoroalkyl substances ("PFAS") are ubiquitous, highly toxic environmental contaminants prevalent in San Diego water systems and natural resources. Exposure to PFAS chemicals is known to cause serious health effects, including cancer, liver, thyroid, and kidney disease, immune system disruption, and pregnancy-induced hypertension, among other ailments. Due to their uniquely strong chemical bonds, PFAS compounds resist environmental degradation and can persist indefinitely once introduced into waters, soils, and other resources. They are often referred to as "forever chemicals" because they do not break down. PFAS compounds are highly soluble and easily migrate in waterways and aquifers to spread contamination far and wide. When consumed, they build up in the tissue of animals (and humans). In this way, PFAS travel up the food chain and cause chronic poisoning, concentrating to dangerous levels in predators (including humans), even where acute exposure levels are slight. Their physical and chemical properties make PFAS uniquely challenging, and costly, to mitigate, eliminate, reduce, or control in the environment, as the compounds continue to circulate through groundwater systems, surface water systems, municipal stormwater and wastewater systems, and the water cycle. PFAS represent a complex, long-term environmental hazard to the People and the City.

2. Defendants are responsible for this hazard. For decades, PFAS manufacturers like 3M (defined below) and DuPont (defined below) profited from the uncontrolled sale, use, and disposal of PFAS chemicals and PFAS-laden products while concealing their knowledge about the grave environmental and human health dangers of these compounds.

3. Defendants each designed, manufactured, marketed, distributed, supplied, and/or sold PFAS-based aqueous film-forming foam ("AFFF") products, and certain chemical ingredients incorporated into those products, that were used and dumped in and near San Diego and which now contribute to a serious environmental and public health crisis.

4. Defendants' conduct has caused extensive contamination and pollution of natural resources located in and around San Diego, including municipal drinking water supplies, as well as municipal stormwater, wastewater, and other water systems.

5. The City provides drinking water to its residents and residents of certain surrounding communities, operates a large municipal stormwater conveyance system pursuant to a National Pollutant Discharge Elimination System ("NPDES") permit, manages and operates municipal wastewater treatment works for the benefit of City residents and those in surrounding communities, and has responsibility for maintaining the integrity and quality of natural resources within its jurisdiction, including groundwater, soils and surface waters.

6. The City and the State of California Environmental Protection Agency ("CalEPA"), through the California State Water Resources Control Board ("Water Board"), have investigated the presence of PFAS contamination in the City's water supplies and other natural resources, as well as municipal water systems and properties under its ownership or management, and continue to conduct monitoring and analysis to conserve such resources and to protect the public health.

7. The City's and CalEPA's continuing investigation has demonstrated the presence of elevated concentrations of PFAS chemicals in those resources and properties, including but not limited to perfluorooctane sulfonic acid ("PFOS") and perfluorooctanoic acid ("PFOA").

8. As a result of detections of PFAS in concentrations exceeding applicable California water standards, particularly in El Cajon Well No. 4 ("Well 4"), the City took action to respond to such contamination, including providing notification to residents and conducting additional monitoring and analysis.

9. The City continues to routinely sample its water supplies to test for PFAS. PFAS contamination has been detected in a number of wells, including but not limited to Well 4, operated and used by the City to provide clean drinking water to residents and for other purposes.

10. On information and belief, the Well 4 contamination resulted from the ordinary use and disposal of AFFF products in firefighting training exercises conducted at Heartland Fire Training Facility in El Cajon, proximate and upgradient to Well 4's location.

11. In addition to drinking water impacts, PFAS contamination caused or contributed to by Defendants' conduct has negatively impacted the City's municipal stormwater and wastewater systems. The City collects, treats, and reclaims or recycles stormwater and wastewater on a citywide basis, and discharges treated water to surface waters, consistent with its NPDES permits. Unknown to the City, PFAS chemicals put into circulation as a result of Defendants' conduct has long contaminated City stormwater and wastewater, resulting in further contamination of natural resources in and near San Diego.

12. The City is in the process of developing remedial measures to control, reduce, and/or eliminate PFAS contamination, among other things, in its stormwater and wastewater systems, including through an extensive, multi-billion-dollar water reclamation project, the Pure Water Program.

13. The PFAS concentrations in natural resources in and near San Diego, in City drinking water supplies, and in City stormwater and wastewater systems poses a significant public health hazard.

14. The People bring this action against Defendants for an order requiring Defendants to abate the public nuisance their conduct has created or to which it has contributed, pursuant to Cal. Civ. Proc. § 731.

15. The City brings this action against Defendants to recover all past, current, and future costs, losses, damages, and other relief relating to the actual or potential presence of PFAS traceable to AFFF products in the City's drinking water supplies, stormwater and wastewater systems, natural resources in and near San Diego, and other affected properties under City ownership or management, or for which the City has a responsibility, under California law, to protect the integrity or quality of such resources or properties. Such costs, losses, and damages include those resulting from or associated with the investigation, assessment, monitoring, analysis, remediation, treatment, removal, disposal, or other past, current, or future action or response, including efforts to protect such resources and properties from future injury and to compensate for the loss of use of such resources and properties, relating to the actual or potential presence of PFAS compounds in such resources and properties as a result, direct or indirect, of Defendants' conduct.

16. PFOS, PFOA, and other PFAS compounds are all synthetic industrial compounds that are highly toxic to human and animal health, extremely persistent in the environment, soluble in water and fatty tissue, bioaccumulative, volatile or semi-volatile, and difficult to remediate or remove from natural resources, water supplies, and other environmental media.

17. Accordingly, PFAS contamination or pollution of municipal resources and properties, natural resources, water infrastructure, and other environmental media represents a public health threat that has and will result in significant costs, losses, and damages to the City, and has and will result in significant public health risks suffered by the People.

18. Defendants designed, manufactured, marketed, promoted, distributed, and/or sold, or acquired or assumed the liabilities of persons that designed, manufactured, marketed, promoted, distributed, and/or sold AFFF products based on PFAS chemistries or PFAS compounds, their precursors, and/or products containing PFAS compounds, for use in AFFF products.

19. Defendants did so with knowledge that these dangerous chemicals would be released into the environment during the ordinary and intended use of their AFFF products, foreseeably causing harm to the City and the People.

20. By the late 1970s, 3M had confirmed internally that PFOS and PFOA had been detected in human blood, i.e., that the chemicals had spread far beyond the immediate site of their application, and were "more toxic than anticipated." The company, however, withheld information concerning these chemicals' toxicity from the U.S. Environmental Protection Agency ("EPA") and other regulators for decades. One of 3M's chief scientists eventually resigned over the company's failure to dedicate sufficient resources to the investigation of PFOS's harms, calling the chemical the "most onerous pollutant since PCB[.]"

21. DuPont, which had worked closely with 3M on research concerning PFOS and PFOA since at least the 1970s, likewise recognized many decades ago that PFOA was toxic and needed to be handled with extreme care and likewise withheld this and other information from regulators and the public.

22. On information and belief, the remaining Defendants also knew or, at a minimum, should have known about the toxicity and environmental hazards posed by the key chemical

ingredients in their AFFF and/or AFFF component products, including through their participation in industry trade groups formed for the purpose of lobbying regulators to protect their lucrative AFFF lines of business.

23. Safer alternatives to AFFF not containing or breaking down into toxic PFAS were available when Defendants designed, manufactured, marketed, distributed, supplied, and/or sold the products that are the subject of this Complaint. Indeed, under regulatory pressure, several of the Defendants have altered the chemical make-up of their AFFF products to rely on fluorosurfactants that they claim are less biopersistent and less toxic. Defendants could have made such changes much sooner.

24. Defendants also failed to provide adequate warnings and instructions with their AFFF products. Indeed, Defendants failed to advise adequately about (i) the harms their PFAS-based AFFF products posed to the environment and human health; (ii) methods of environmentally safe disposal of their AFFF products; and (iii) designs of AFFF release sites, including firefighting training sites, that would limit or potentially eliminate the release of PFAS into the environment or otherwise mitigate their environmental effects.

25. On information and belief, Defendants' AFFF products and/or PFAS-based products used in the production of AFFF products have been used, stored, handled, released, and disposed of within San Diego and/or in the vicinity of the City's resources, including its drinking water supplies, wastewater treatment works, stormwater conveyance system, surface waterbodies, and other natural resources.

26. As a result, Defendants caused contamination of the City's drinking water supplies, stormwater and wastewater systems, natural resources in and near San Diego, and other affected properties under City ownership or management. Such resources and properties have been and continue to be contaminated by Defendants' PFAS-laced AFFF products and additional resources and properties are under threat of future injury due to known PFAS contamination upstream and/or upgradient from such resources and properties.

27. At all times relevant to this action, the City neither knew nor should have known of the actual or potential contamination of its resources and properties with dangerous PFAS

compounds resulting from the ordinary and intended use and disposal of Defendants' AFFF products.

28. The City seeks to recover all damages available by law, including compensatory, consequential, and punitive damages; restitution; injunctive relief requiring Defendants to abate injured or impaired City resources and properties; and all other relief available under law.

29. The People seek an order requiring Defendants to abate the public nuisance caused or maintained by their conduct.

30. This action addresses only PFAS-related injuries attributable to the Defendants as a result of the design, manufacture, marketing, distribution, sale, use, and/or disposal of AFFF products and AFFF component products. To the extent the City, and/or the People, have suffered or may in the future suffer injuries relating to PFAS associated with a different application or other use of PFAS compounds, such claims are not included in this action, may be pursued in a separate action, and are expressly preserved.

## II. JURISDICTION

31. The Superior Court has original jurisdiction over this action pursuant to Article VI, Section 10 of the California Constitution.

32. The Superior Court has personal jurisdiction over Defendants in this action because Defendants have, among other things, conducted business in this jurisdiction and caused tortious injury in this jurisdiction.

33. The properties and natural resources that are the subject of this suit all rest within San Diego or are under City control or management. No federal subject-matter jurisdiction exists or is invoked herein.

## III. PARTIES

### A. PLAINTIFFS

34. Plaintiff the People of the State of California, by and through Mara W. Elliott, San Diego City Attorney, prosecute this action pursuant to California Code of Civil Procedure § 731. The People allege that Defendants have caused or contributed to the creation or maintenance of a public nuisance and seek abatement thereof.

35. Plaintiff the City of San Diego is a municipal corporation established pursuant to Article XI, Section 3 of the California Constitution. The City owns and operates drinking water systems, water treatment systems, and water delivery systems, as well as large municipal stormwater and wastewater systems.

36. Pursuant to the San Diego City Charter ("Charter"), the City is empowered to regulate, use, and govern the water systems of the City, both within and without the territorial limits of the City. Charter, Art. I, sec. 3.

37. Further, under the Charter, the City has the obligation and responsibility to provide public works services, water services, public health services, park and recreation services, and other services and programs for public benefit. Charter, Art. V, sec. 26.1.

38. The protection of natural resources under City ownership or management from environmental contamination and degradation, and the City's interest in ensuring the health and well-being of its environment and economy and the free use of its natural resources by City residents, are essential public functions of the City.

39. Consistent with Article VII of the Charter, the City operates an Environmental Growth Fund used exclusively for the purpose of preserving and enhancing the environment of the City. Charter, Art. VII, sec. 103.1a.

40. The City brings this action in its capacity as proprietor of municipal water systems, as owner or manager of natural resources, and pursuant to its inherent police powers, which include without limitation the powers to prevent and abate pollution of natural resources, to prevent and abate nuisances and to prevent and abate hazards to the public health, safety, and welfare, and to the environment.

41. The People bring this action solely to abate a public nuisance.

**B. DEFENDANTS**

42. Defendant 3M Company ("3M") is a Delaware corporation with its principal place of business in St. Paul, Minnesota. 3M designed, manufactured, marketed, sold, and/or distributed AFFF products containing or breaking down into PFAS, including PFOS, PFOA, and PFHxS. Upon

information and belief, these 3M products were used and discharged into the environment in and around San Diego.

43. Defendant Buckeye Fire Equipment Co. ("Buckeye") is an Ohio corporation with its principal place of business in Mountain, North Carolina. Buckeye designed, manufactured, marketed, sold, and/or distributed AFFF products containing or breaking down into PFAS. Upon information and belief, these AFFF products were used and released into the environment in and around San Diego.

44. Defendant Carrier Global Corp. ("Carrier") is a Delaware corporation with its principal place of business in Palm Beach Gardens, Florida.

45. Defendant Kidde-Fenwal, Inc. is a Delaware corporation with its principal place of business in Hartford, Connecticut.

46. Defendant Kidde PLC, Inc. is a Delaware corporation with its principal place of business in Farmington, Connecticut.

47. Defendant Raytheon Technologies Corp. ("Raytheon") is a Delaware corporation with its principal place of business in Farmington, Connecticut. Raytheon was formerly known as United Technologies Corp.

48. Defendant UTC Fire & Security Americas Corp., Inc. ("UTC") is a Delaware corporation with its principal place of business in Palm Beach Gardens, Florida. UTC is a successor-in-interest to United Technologies Corp.

49. Defendants Carrier, Kidde-Fenwal, Inc., Kidde PLC, Inc., Raytheon, and UTC are referred to herein as the "Kidde Defendants." The Kidde Defendants designed, manufactured, marketed, sold, and/or distributed AFFF products containing or breaking down into PFAS. Upon information and belief, these AFFF products were used and released into the environment in and around San Diego.

50. Defendant Chemguard, Inc. ("Chemguard") is a Texas corporation with its principal place of business in Marinette, Wisconsin. Chemguard designed, manufactured, marketed, sold, and/or distributed AFFF products containing or breaking down into PFAS. Upon information and

belief, these Chemguard products were used and discharged into the environment in and around San Diego.

51. Defendant National Foam, Inc. ("National Foam") is a Delaware corporation with its principal place of business in Angier, North Carolina. National Foam is a subsidiary of Angus International Safety Group, Ltd. National Foam designed, manufactured, marketed, sold, and/or distributed AFFF products containing or breaking down into PFAS. Upon information and belief, these AFFF products were used and released into the environment in and around San Diego.

52. Defendant Tyco Fire Products LP ("Tyco") is a Delaware limited partnership with its principal place of business in Lansdale, Pennsylvania. Tyco is the parent corporation to Chemguard and successor-in-interest to the Ansul Company ("Ansul"). Tyco designed, manufactured, marketed, sold, and/or distributed AFFF products containing or breaking down into PFAS. Upon information and belief, these Tyco products were used and discharged into the environment in and around San Diego.

53. Defendant AGC Chemicals Americas, Inc. ("AGC") is a Delaware corporation with its principal place of business in Exton, Pennsylvania. Upon information and belief, AGC's fluorosurfactants were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

54. Defendant Archroma U.S., Inc. ("Archroma") is a Delaware corporation with its principal place of business in Charlotte, North Carolina. Upon information and belief, Archroma's fluorosurfactants were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

55. Defendant Arkema, Inc. ("Arkema") is a Pennsylvania corporation with its principal place of business in King of Prussia, Pennsylvania. On information and belief, Arkema was formerly known as Atochem, Inc. and/or is the successor-in-interest to Atochem, Inc. On information and belief, fluorosurfactants manufactured by Arkema and/or Atochem, Inc. were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

56. Defendant BASF Corp. ("BASF") is a Delaware corporation with its principal place of business in Florham Park, New Jersey. BASF is a successor-in-interest to Ciba-Geigy Corp.

Upon information and belief, fluorosurfactants manufactured by BASF and/or Ciba-Geigy Corporation or Ciba Specialty Chemicals, including those trademarked Lodyne™, were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

57. Defendant ChemDesign Products, Inc. ("ChemDesign") is a Texas corporation with its principal place of business in Marinette, Wisconsin. Upon information and belief, fluorosurfactants manufactured by ChemDesign were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

58. Defendant Chemicals Incorporation ("Chem Inc.") is a Texas corporation with its principal place of business in Baytown, Texas. Upon information and belief, fluorosurfactants manufactured by Chem Inc. were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

59. Defendant the Chemours Co. is a Delaware corporation with its principal place of business in Wilmington, Delaware. Chemours Co. was previously a subsidiary of Old DuPont (as defined below) and was spun out of Old DuPont into an independent, publicly traded company on July 1, 2015.

60. Defendant the Chemours Co. FC, LLC is a Delaware LLC with its principal place of business in Wilmington, Delaware. Chemours Co. FC, LLC is a wholly-owned subsidiary of Chemours Co.

61. Defendants the Chemours Co. and the Chemours Co. FC, LLC are jointly referred to herein as "Chemours." Chemours designed, manufactured, marketed, sold, and/or distributed fluorosurfactants containing or breaking down into PFAS for use in the manufacture of AFFF. Upon information and belief, Chemours's fluorosurfactants, including those trademarked Capstone™, were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

62. Defendant Clariant Corp. ("Clariant") is a New York corporation with its principal place of business in Charlotte, North Carolina. Upon information and belief, Clariant's fluorosurfactants were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

63. Defendant Corteva, Inc. is a Delaware corporation with its principal place of business in Wilmington, Delaware.

64. Defendant DuPont de Nemours, Inc. ("New DuPont") is a Delaware corporation with its principal place of business in Wilmington, Delaware.

65. Defendant E.I. du Pont de Nemours and Co. ("Old DuPont") is a Delaware corporation with its headquarters and principal place of business in Wilmington, Delaware.

66. New DuPont, Old DuPont, and Corteva, Inc. are referred to collectively as "DuPont." For decades, DuPont manufactured products containing PFAS, including PFOA, which DuPont obtained from 3M. In the early 2000s, after 3M had ceased the manufacture of PFOS and PFOA, DuPont itself began to manufacture PFOA. DuPont designed, manufactured, marketed, sold, and/or distributed fluorosurfactants containing or breaking down into PFAS for use in the manufacture of AFFF. Upon information and belief, DuPont's fluorosurfactants, including those trademarked Capstone™, were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

67. Defendant Deepwater Chemicals, Inc. ("Deepwater") is a Delaware corporation with its principal place of business in Woodward, Oklahoma. Upon information and belief, fluorosurfactants manufactured by Deepwater were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

68. Defendant Dynax Corp. ("Dynax") is a Delaware corporation with its principal place of business in Elmsford, New York. Upon information and belief, Dynax's fluorosurfactants were used to manufacture AFFF that was used and discharged into the environment in and around San Diego.

69. On information and belief, Does 1-100 were designers, manufacturers, marketers, distributors, and/or sellers of AFFF products that have and continue to contaminate City resources and properties. Although the identities of these Doe defendants are currently unknown, it is expected that their names will be ascertained during discovery, at which time Plaintiffs will move for leave to add those persons as defendants in this litigation.

## IV. FACTUAL ALLEGATIONS

### A. PFAS ARE DANGEROUS CHEMICALS THAT THREATEN HUMAN AND ENVIRONMENTAL HEALTH AND SAFETY

70. Per- and polyfluoroalkyl substances (PFAS, as defined above) are a group of synthetic chemical compounds containing fluorine and carbon atoms. They are known as "surfactants" in that they reduce the surface tension of water. As such, these chemicals have been used for decades in the manufacture of household and commercial products that resist heat, stains, oil, and water, including carpet and clothing treatments, cardboard packaging and leather products, emulsifiers, wetting agents, additives and coatings, processing aids in the manufacture of fluoropolymers such as nonstick coatings on cookware, and membranes for clothing that are both waterproof and breathable.

71. PFAS are man-made; they do not occur naturally.

72. The two most widely studied types of PFAS are PFOA and PFOS, both synthetic, fully fluorinated organic acids with eight carbon atoms.

73. Although PFOS and PFOA are the most widely studied types of PFAS, the PFAS family includes thousands of different chemicals. Defendants have incorporated dozens of different PFAS chemicals in their AFFF product formulations, including PFOA, PFOS, and PFHxS, among others.

74. PFAS compounds have a number of unique properties that, together, turn these chemicals into a grave threat to public health and the environment.

75. ***PFAS chemicals are mobile and persistent.*** They readily spread into the natural environment upon release, where they break down very slowly, if at all.

76. The compounds are characterized by multiple carbon-fluorine bonds, which are exceptionally strong and stable. As such, they are extremely persistent in the environment and resistant to metabolic and environmental degradation.

77. PFAS compounds easily dissolve in water and are thus highly mobile and readily spread in the environment. They contaminate soils and leach from the soil into groundwater, where they can travel significant distances underground.

78. PFAS compounds are also volatile or semi-volatile. Small amounts of the chemicals are routinely and uncontrollably released in the vapor phase from PFAS-containing products and PFAS-contaminated sites and waterbodies, and travel with air currents in vapor form. When such vapors re-suspend or condense, the chemicals are deposited in new locations and environmental media, including surface waters, soils, and others.

79. Through both water and air, therefore, PFAS contamination is aggressively mobile and difficult to control.

80. ***PFAS chemicals bioaccumulate and biomagnify in the environment.*** Bioaccumulation occurs when an organism absorbs a substance at a rate faster than that at which the substance is lost by catabolism and excretion. Biomagnification is the increasing concentration of a substance in the tissues of organisms at successively higher levels in a food chain.

81. PFAS chemicals are extremely stable and persistent and as such, once ingested, tend to bioaccumulate in individual organisms for a significant period of time.

82. For example, PFOS, PFOA, and PFHxS, among other PFAS, have been shown to accumulate to levels of concern in fish, reaching concentrations of several thousands of times higher than in surrounding water. The compounds have been detected in both wild-caught and farmed fish, presumably as a result of bioaccumulation and/or trophic transfer, i.e., biomagnification up the food chain.

83. PFOA, PFOS, and PFHxS, among other PFAS, have also been shown to bioaccumulate in air-breathing species, including humans.

84. PFAS chemicals further bioaccumulate in the unborn and in infants by crossing the placenta from mother to fetus and by passing to infants through breast milk.

85. PFAS chemicals biomagnify up the food chain—for example, when humans eat fish that have ingested the substances. PFOS has been observed in high concentrations in various animals higher up in the food chain, including bald eagles, walrus, narwhals, and beluga whales.

86. Finally, and critically, ***PFAS chemicals are toxic***. Numerous studies make plain that exposure to or ingestion of these chemicals can pose serious risks to humans and to animals.

87. Human epidemiological studies, relied upon by the EPA for purposes of the agency's health advisories on PFOA, have found associations between PFOA exposure and high cholesterol, increased liver enzymes, decreased vaccination response, thyroid disorders, pregnancy-induced hypertension and preeclampsia, and testicular and kidney cancer.

88. Recent research conducted by the National Toxicology Program ("NTP"), a division of the National Institute for Environmental Health Sciences ("NIEHS"), has also linked exposure to extremely small amounts of PFOA to pancreatic cancer.

89. Alarmingly, when discussing the research at a conference on PFAS in June 2019, the director of NIEHS and NTP, Dr. Linda Birnbaum, told attendees that pancreatic tumors are present at "very, very low concentrations from PFOA." Dr. Birnbaum recommended that, to protect human health, the maximum concentration of PFOA should be 0.1 parts per trillion, or 700 times lower than the current EPA health advisory level of 70 ppt in drinking water.

90. Human epidemiological studies, relied upon by the EPA for purposes of the agency's health advisories on PFOS, found associations between PFOS exposure and high cholesterol, thyroid disease, and adverse reproductive and developmental effects, including gestational diabetes, preeclampsia, and low birth weight. The developing fetus and newborns are particularly sensitive to PFOS-induced toxicity.

91. PFOS and PFOA are toxic to laboratory animals, producing reproductive, developmental, and systemic effects in laboratory tests.

92. The World Health Organization's International Agency for Research on Cancer has found that PFOA is possibly carcinogenic to humans.

93. The EPA has found that there is suggestive evidence that PFOS and PFOA may cause cancer in humans.

94. A March 2020 peer-reviewed study applied ten key characteristics of carcinogens to 26 PFAS compounds, including PFOA, PFOS, and PFHxS. The "key characteristics of carcinogens" framework is used for cancer hazard identification.

95. That study found "strong evidence" that multiple PFAS induce oxidative stress, are immunosuppressive, and modulate receptor-mediated effects. The study found "suggestive evidence" that some PFAS can induce epigenetic alterations and influence cell proliferation.

96. In particular, the study identified evidence that: (a) PFOA induces epigenetic alterations; induces oxidative stress; induces chronic inflammation; is immunosuppressive; modulates receptor-mediated effects; and alters cell proliferation; (b) PFOS induces epigenetic alterations; induces oxidative stress; induces chronic inflammation; is immunosuppressive; modulates receptor-mediated effects; and alters cell proliferation; and (c) PFHxS induces oxidative stress; is immunosuppressive; modulates receptor-mediated effects; and alters cell proliferation.

97. Similar traits associated with carcinogenicity were identified with respect to other PFAS compounds utilized in AFFF products designed, manufactured, marketed, distributed, provided, supplied, and sold by Defendants.

98. Another peer-reviewed study published in 2020 found further evidence that certain PFAS compounds, particularly PFOS and PFOA, result in premature births, decreased fertility, and increased odds of low birth weight. These adverse effects on reproductive health were demonstrated by an analysis of birth outcomes in Oakdale, Minnesota, where a portion of the population faced elevated exposure to PFAS due to long-term contamination of drinking water supplies from industrial waste disposal. The study focused on birth outcomes in the area from 2002 to 2011. Reproductive outcomes improved significantly following the installation of a water filtration facility in Oakdale at the end of 2006, demonstrating the causal relationship between exposure to high level of PFAS in drinking water and reproductive health.

99. In October 2021, EPA also released a final human health toxicity assessment for GenX chemicals, which incorporated new data available since 2018. GenX chemicals, as explained further below, were a trademarked family of short-chain PFAS chemicals marketed since the 2010s by DuPont as a purportedly safer alternative to PFOA. The EPA's assessment resulted in a lower, more protective toxicity value for GenX chemicals relative to EPA's 2018 draft toxicity assessment.

100. On November 16, 2021, EPA further provided the Science Advisory Board PFAS Review Panel with recent scientific data and new analyses that indicate negative health effects may

occur at much lower levels of exposure to PFOA and PFOS than had previously been understood, and that PFOA is a likely carcinogen. These EPA analyses are now undergoing peer review, following which they will be used to inform health advisories and the development of Maximum Contaminant Level Goals and a National Primary Drinking Water Regulation for PFOA and PFOS.

101. In addition, PFAS compounds have been shown to affect growth, learning, and behavior of infants and older children, decrease women's ability to become pregnant, and interfere with the body's natural hormones.

### B. THE PUBLIC'S UNDERSTANDING OF PFAS, A NATIONWIDE ENVIRONMENTAL PROBLEM, CONTINUES TO EVOLVE

102. Given their physical and chemical properties, PFAS chemicals have become incredibly widespread in the environment, contaminating drinking water supplies, water infrastructure (including stormwater systems, water treatment plants, and drinking water delivery infrastructure), and posing an environmental and human health crisis in San Diego and beyond.

103. Indeed, PFAS have been detected in environmental media and biota in many parts of the world, including oceans and the Arctic.

104. The chemicals have been found in cereals, fish, soft drinks, milk, olive oil, and meat, as well as in prepared foods.

105. According to the EPA, between 1999 and 2012, PFOA and PFOS have been detected in the blood serum of 99% of the U.S. population. This is particularly troubling given the real and significant adverse health effects these chemicals pose.

106. The Director of the U.S. Center for Disease Control's National Center for Environmental Health, Patrick Breysse, described the chemicals in October of 2017 as "one of the most seminal public health challenges for the next decades" and estimated 10 million Americans were drinking contaminated water. Current research estimates that this number is significantly higher—likely in the hundreds of millions of Americans.

107. This understanding of PFAS contamination as a widespread public health crisis has been slow to evolve, however, and has only fairly recently garnered broad attention. Indeed, although the EPA began to investigate the safety of PFOA and PFOS in or around 1998 following

some limited disclosures by 3M and others, the agency did not begin to issue health advisories for these chemicals until January 8, 2009.

108. The 2009 EPA health advisory noted merely that "action should be taken to reduce exposure" to drinking water containing levels of PFOA and PFOS exceeding 400 parts per trillion ("ppt") and 200 ppt, respectively.

109. In May 2016, the EPA significantly revised its PFOA and PFOS health advisory, recommending that drinking water concentrations for PFOA and PFOS, either singly or combined, should not exceed 70 ppt.

110. Notably, the EPA's health advisories are "informal technical guidance to assist federal, state, and local officials, as well as managers of public or community water systems in protecting public health. They are not regulations and should not be construed as legally enforceable federal standards."

111. EPA is poised to strictly regulate PFAS in the near future. As of February 2020, EPA announced its intention to regulate PFOA and PFOS as "hazardous substances" under federal environmental laws, such as CERCLA.

112. As of November 2020, EPA announced its intention to address PFAS in NPDES permits issued by EPA.

113. On February 22, 2021, EPA finalized its decision to regulate levels of PFOS and PFOA in drinking water under the Safe Drinking Water Act (SDWA), including by proposing enforceable drinking water quality standards, known as Maximum Contaminant Levels ("MCLs)".

114. On September 8, 2021, EPA announced that it was initiating three new rulemakings to reduce PFAS contamination by way of wastewater discharges from several key industries.

115. The State of California has developed and promulgated guidance and a variety of rules and regulations concerning PFAS contamination of drinking water supplies and other media.

116. In July 2018, the Department of Drinking Water ("DDW") established notification levels of 14 ppt for PFOA and 13 ppt for PFOS, subject to which drinking water providers in California were required to notify consumers if testing demonstrated PFOA/PFOS levels at or above those thresholds. DDW also established a response level of 70 ppt for combined PFOA/PFOS

concentrations, subject to which drinking water providers in California were required to take corrective or remedial action with respect to water systems if testing demonstrated PFOA/PFOS levels at or above that threshold.

117. In August 2019, DDW revised the notification levels to 5.1 ppt for PFOA and 6.5 ppt for PFOS, maintaining the 70 ppt response level.

118. On February 6, 2020, DDW issued updated drinking water response levels of 10 ppt for PFOA and 40 ppt for PFOS (averaged over one year).

119. On March 5, 2021, DDW issued a drinking water notification level of 0.5 ppb (500 ppt) for PFBS, and a response level of 5 ppb (5,000 ppt) for PFBS.

### C. DEFENDANTS' AFFF PRODUCTS HAVE FOR DECADES CONTAMINATED THE ENVIRONMENT WITH PFAS

120. The PFAS application critical to the claims asserted in this Complaint is AFFF, which is widely used to suppress and extinguish fires of flammable liquids, such as fuel and oil.

121. In the 1940s, 3M began to experiment with a process called electrochemical fluorination to create the carbon-fluorine bonds that are the key components of PFAS, including PFOA, PFOS, and PFHxS.

122. The other major carbon-fluorine bond producing process, which was used by the remaining Defendants, is called telomerization. This process generally results in PFOA and other carboxylates.

123. Beginning in the 1950s through 2000, 3M sold PFOA to DuPont for use in DuPont's manufacturing operations. After 3M ceased production beginning in or around 2000, DuPont began producing PFOA.

124. Recognizing the compounds' strong surfactant properties described above and building on its earlier experiments, 3M began to develop AFFF containing PFOS in the early 1960s to suppress flammable liquid fires that cannot be effectively extinguished with water alone.

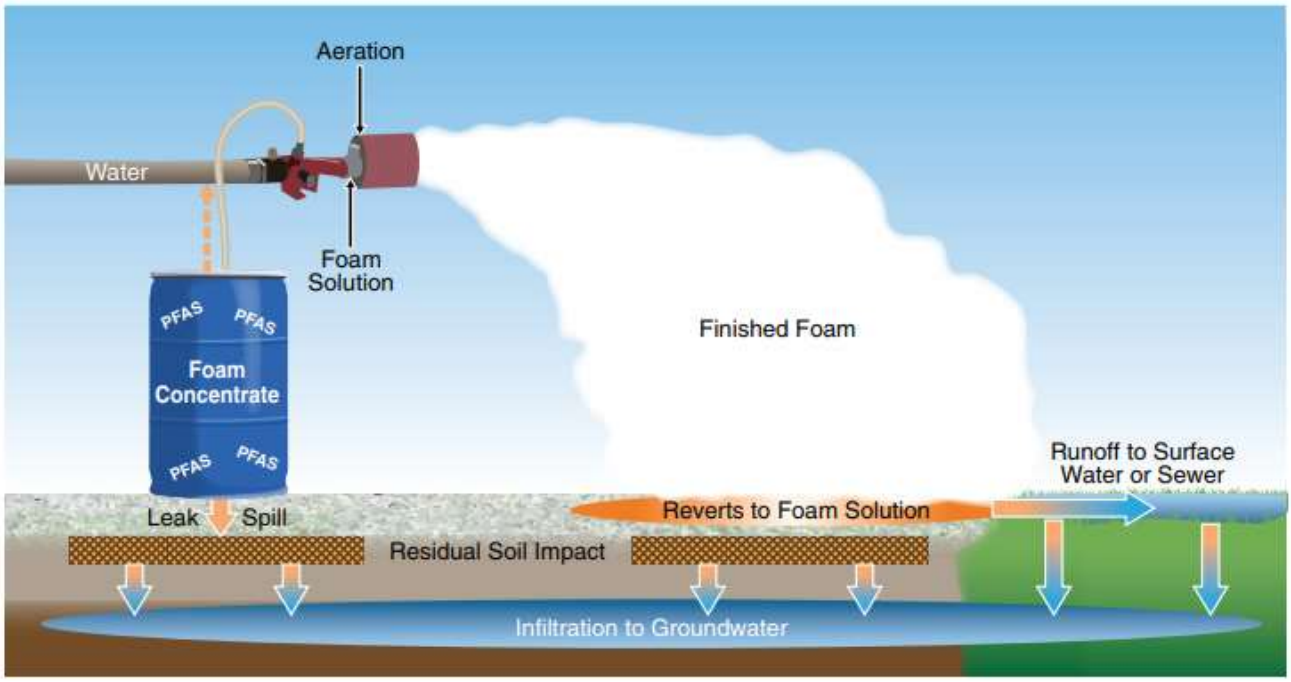
125. In the late 1960s, the United States military issued military specification MIL-F-24385 governing the requirements for AFFF ("AFFF Mil Spec"). It required that the AFFF concentrate "consist of fluorocarbon surfactants plus other compounds . . ." The AFFF Mil Spec,

however, contains no further requirements concerning these fluorocarbons surfactants, such as the length of the fluorine-carbon chain. The AFFF Mil Spec also states that "[t]he material shall have no adverse effect on the health of personnel when used for its intended purpose." The current version of the AFFF Mil Spec still contains that language.

126. The United States government has expressly clarified that the AFFF Mil Spec "was a performance military specification (as opposed to a detail military specification); meaning that the product manufacturers [and not the United States government] determine[d] the exact formulation and specific perfluorocarbon surfactants . . ."

127. From the 1960s to about 1973, 3M was the sole supplier of AFFFs. Beginning in about 1973, fluorotelomer-based AFFF manufacturers entered the market.

128. AFFF is applied by firefighters in the field by mixing foam concentrate and water to make a foam solution. When applied to a fire, the foam solution is aerated at the nozzle. The foam solution is sprayed out to coat the fire, blocking the supply of oxygen feeding the fire and creating a cooling effect and evaporation barrier. A film also forms to smother the fire after the foam has dissipated:



129. In other words, it is intended by, and foreseeable to, the AFFF manufacturer or supplier that AFFF will be mixed with water and sprayed in such a manner that it can freely seep into the groundwater and soil, contaminating the environment.

130. PFAS-based AFFF is the predominant commercial PFAS application that, when used as intended, releases toxic chemicals directly into the environment in a manner enabling them to freely seep into the groundwater, contaminate drinking water supplies, and travel long distances to cause further, widespread environmental contamination.

131. A single firefighting event or training exercise may result in the release of thousands of gallons of foam solution laced with PFAS that then enter and contaminate the environment.

132. For decades, PFAS-based AFFF products have been stored and used for fire suppression, fire training, and flammable vapor suppression at hundreds of locations, such as fire training schools, military installations, and civilian airports, as well as at petroleum refineries, storage facilities, and chemical manufacturing plants throughout the United States, including in and around San Diego.

133. Additionally, local fire departments have used and maintained quantities of AFFF in their inventories.

134. Fire training exercises involving AFFF are common, particularly on airfields, fire training schools, and military installations, and have been performed many thousands of times since the 1960s, each time releasing vast quantities of toxic chemicals into the environment.

135. AFFF use has been identified as one of the main contributors to the widespread environmental contamination with PFAS.

136. Despite the recent phase-out of certain long-chain PFAS, further discussed below, much of the current AFFF stockpiles still contain long-chain PFAS constituents due to the long shelf-life of these products. PFAS-based AFFF thus continues to be widely stored and used, including in or around San Diego.

137. Significantly, in recognition of the dangers of PFAS, the AFFF Mil Spec was amended in September 2017 to state expressly that the Department of Defense seeks "to acquire and use a non-fluorinated AFFF formulation or equivalent firefighting agent to meet [its] performance

requirements ….” and again in April 2020 to make clear that the AFFF Mil Spec requires only that AFFF “[c]oncentrates shall consist of surfactants plus other compounds…” – not necessarily fluorosurfactants.

138. Had Defendants been forthright about their products’ chemical properties and the environmental and human health hazards they posed, the Department of Defense (and federal and state regulatory agencies) would have taken steps to prevent, control, or minimize the environmental and human health threats from AFFF containing and/or breaking down into PFAS (including PFOA, PFOS, and PFHxS), much sooner, or would never have used them in the first place.

### D. THE DEFENDANTS KNEW ABOUT BUT CONCEALED THE DANGERS OF PFAS CONTAINED IN AFFF

139. Particularly 3M and DuPont have known or, at a minimum, should have known for many decades that PFOA, PFOS, and other PFAS compounds are mobile and persistent, bioaccumulative and biomagnifying, volatile, and, above all, toxic.

140. Upon information and belief, the other Defendants, each of which designed, manufactured, marketed, provided, supplied, sold, and/or distributed PFAS-based AFFF and/or AFFF component products, likewise knew of the dangers posed by PFAS, including through information they obtained as part of their participation in trade industry associations.

141. All Defendants were careful to withhold the most damning information about PFOS, PFOA, and other PFAS from the public and regulators.

142. 3M conducted extensive toxicity studies on PFAS, including PFOS and PFOA, as early as the 1950s, concluding that the chemicals were toxic.

143. Further toxicity studies conducted by 3M scientists in the late 1970s confirmed that the chemicals were even “more toxic than anticipated.”

144. In 1978, 3M conducted studies on monkeys and rats, feeding them various dosages of PFOS and PFOA. All monkeys in the study died within the first few days after being given PFOS at a dosage of 4.5 mg/kg/day. Monkeys being given 100 mg/kg/day of PFOA “all died during weeks 2 and 5 of the study.” The companies’ studies showed that both PFOA and PFOS affected the liver and gastrointestinal tract of the species tested.

145. 3M concluded that PFOS was "the most toxic" of the compounds studied and "certainly more toxic than anticipated."

146. 3M consulted with Harold Hodge, a well-known toxicologist, who emphasized that it was of "utmost importance" to determine whether these chemicals "or its metabolites are present in man, what level they are present, and the degree of persistence (half-life) of these materials."

147. Further, in 1975, 3M was alerted by third-party researchers that PFOS was detectable in human blood serum and thus had obviously spread beyond the immediate site of its applications and was bioaccumulating. 3M's own research confirmed by the next year that the level of fluorochemicals in the blood of its own workers was "1,000 times normal."

148. Conducting research around its manufacturing plants, 3M knew by 1979 that its fluorochemicals "bioaccumulated more readily in the gastrointestinal tract, fat and reproductive system [at least in] channel catfish[.]"

149. By 1979, 3M recognized that fluorochemicals may pose a cancer risk. Indeed, one of its scientists pressed that it was "paramount to begin now an assessment of the potential (if any) of long term (carcinogenic) effects for these compounds which are known to persist for a long time in the body and thereby give long term chronic exposure."

150. 3M never published its toxicity studies and worked actively to stifle research on the adverse effects of PFAS, including PFOA and PFOS. Indeed, 3M kept John Giesy, Ph.D., Professor and Canada Research Chair in Environmental Toxicology in the Department of Veterinary Biomedical Sciences and Toxicology Centre at the University of Saskatchewan, on its payroll to the tune of millions of dollars, for the purpose of influencing independent academic research. It was Prof. Giesy's professed goal to keep unfavorable papers regarding PFAS out of the academic literature, lest plaintiffs find scientific support for legal theories seeking to hold 3M liable for injuries.

151. 3M also advised its employees not to put their thoughts and research concerning PFOS or PFOA to writing, as such communications would need to be disclosed during discovery in likely litigation.

152. 3M also knew full well the environmental implications associated with PFAS compounds, including PFOS and PFOA, but refused to allow testing to perform precise ecological risk assessments. One of its longtime scientists, Dr. Richard Purdy, stated in an internal email: "PFOS is the most onerous pollutant since PCB and you want to avoid collecting data that indicates that it is probably worse. I am outrage[d.]"

153. Despite 3M's knowledge of PFAS toxicity and potential carcinogenicity, the mobility and persistence in the environment of such chemicals, and their tendency to bioaccumulate and biomagnify, the company continued to manufacture, sell, and distribute PFAS-based AFFF until at least 2000.

154. Dr. Purdy resigned, exhausted by the company's "roadblocks, delays, and indecision" concerning research on PFAS' environmental effects and its failure to address their known environmental harms:

> • 3M continues to make and sell these chemicals, though the company knows of an ecological risk assessment I did that indicates there is a better than 100% probability that perfluorooctansulfonate is biomagnifying in the food chain and harming sea mammals. This chemical is more stable than many rocks. And the chemicals the company is considering for replacement are just as stable and biologically available. The risk assessment I performed was simple, and not worst case. If worst case is used, the probability of harm exceeds 100,000%.

Dr. Purdy concluded that he could no longer work for a company "concerned with markets, legal defensibility and image over environmental safety."

155. Dr. Purdy copied the EPA on his March 1999 resignation letter.

156. Shortly thereafter, 3M supplemented its prior submissions to the EPA with critical information referenced by Dr. Purdy. In 2000, 3M "voluntarily" ceased production of certain PFAS compounds, including PFOS and PFOA.

157. In April 2006, 3M paid a penalty of more than $1.5 million to the EPA for its failure to disclose pertinent studies regarding PFOA and PFOS.

158. Much like 3M, DuPont has been aware of the toxicity of PFAS, including PFOA, for decades.

159. By 1961, DuPont's own researchers had concluded that PFOA was toxic and should be "handled with extreme care." During the 1960s, DuPont also had knowledge that PFOA caused adverse liver reactions in dogs and rats.

160. By 1976, DuPont was also aware of research reports that detected organic fluorine in blood bank samples in the U.S., which the researchers believed to be a potential result of human exposure to PFOA. In other words, DuPont knew or should have known that PFOA was traveling in the environment and bioaccumulating in other organisms including in people.

161. By 1982, DuPont's corporate medical director, Bruce Karrh, in internal correspondence confirmed that PFOA stays in the blood for a long time and registered his concern that members of the local community may be affected by PFOA releases. DuPont then began a clandestine water sampling program to determine how far a distance from its operations PFOA remained in the waterways at elevated levels. DuPont detected PFOA in water supplies at a distance of at least 79 miles from its Parkersburg plant.

162. In 1979, DuPont further became aware of the PFOA/PFOS toxicity studies 3M had conducted on monkeys and rats described above.

163. About three years later, 3M also shared a study undertaken on pregnant rats, indicating that PFOA led to adverse effects in fetuses. DuPont tested the blood of female workers who had given birth and had been exposed to PFOA, documenting that PFOA moved across the human placenta.

164. DuPont transferred all women out of work assignments with potential exposure to PFOA, but concealed its pregnancy-related study from the workers, the EPA and the public.

165. During the mid-1980s, DuPont continued to find evidence of toxicity of PFOA. In 1985 and 1986, researchers from DuPont's Haskell Laboratory for Toxicology and Industrial Medicine published two studies on the toxicity of PFOA. One study found PFOA to be "moderately toxic," producing "an increase in liver size and corneal capacity" in rats exposed by inhalation to PFOA; the other studied dermal toxicity in rats and rabbits and found skin irritation in both, and increased liver size in rats.

166. By 1988, DuPont was aware that at least one toxicity study performed on laboratory rats revealed a relationship between PFOA exposure and increased rates of certain types of cancer, including testicular cancer.

167. In 1988, DuPont internally classified PFOA as a possible human carcinogen.

168. Evidence of PFOA's toxic effects continued to mount. In 1999, DuPont received data from a laboratory study on the effects of PFOA exposure on primates that showed that two of twenty-two monkeys had died, including one that had received the lowest dose of PFOA. And, by June 2000, DuPont was aware that the American Council of Governmental and Industrial Hygienists had designated PFOA as a "confirmed animal carcinogen."

169. Despite its knowledge of PFOA's toxicity and carcinogenicity, its mobility and persistence in the environment, and its tendency to bioaccumulate, DuPont continued to use PFOA in its products (and, beginning in 2002, also manufactured the chemical once its primary manufacturing source, 3M, had exited that market), including surfactants made for use in the manufacture of AFFF.

170. Having doubled down on the PFAS business, DuPont continued to actively conceal the risks of PFOA and other PFAS from the public. Beginning in 2003, DuPont paid various consultants, including The Weinberg Group, thousands of dollars to implement a comprehensive strategy to attack and discredit those who alleged adverse health effects from PFOA, to prevent third parties from connecting DuPont to PFOA health problems, to coordinate media and third-party communications, and to thwart any PFOA-related litigation.

171. In February 2003, a manager at DuPont's Parkersburg plant made knowingly false and misleading statements to the media, that: "[i]n more than 50 years of [PFOA] use by [DuPont] and others, there have been no known adverse human health effects associated with the chemical," that "all" of the available scientific research "has been provided to both state and federal regulators," that "epidemiological studies of workers do not indicate an increased risk of cancer associated with exposure to [PFOA]," that "[DuPont] has made significant efforts to respond to the public honestly and openly with correct information about [PFOA]," and that "the use of [PFOA] at the Washington Works site has not posed a risk to either human health or the environment."

172. Later, in March and April of 2003, various DuPont employees and executives — including its Vice President and General Manager of Fluoroproducts, the Director of its Haskell Laboratory, its spokesperson for the Plant, and its CEO — made public statements denying that DuPont had seen any negative impacts on human health or the environment caused by DuPont's use of PFOA.

173. DuPont made multiple, additional knowingly false and misleading public statements regarding the toxicity and adverse health effects of PFOA and other PFAS.

174. DuPont settled the Parkersburg resident litigation in 2005, as part of which settlement DuPont would financially support what was dubbed the "C8 Science Panel," made up of three independent epidemiologists from Emory University, Brown University, and the London School of Hygiene and Tropical Medicine, and tasked with researching the health effects of PFOA based on blood samples and other health data taken from almost 70,000 residents of the mid-Ohio Valley.

175. Also in 2005, the EPA fined DuPont $16.5 million, then the largest civil administrative penalty the agency had ever issued, for the company's failure to report possible health risks associated with PFOA.

176. With the writing on the wall and upon invitation by the EPA, DuPont agreed in 2006 to join the "PFOA Stewardship Program" working towards the elimination of PFOA by 2015.

177. In the meantime, however, the company continued to manufacture PFOA, and at least until 2008 the company made fluorotelomers with PFOA byproducts for the express and intended purpose of being used in the manufacture of AFFF.

178. The C8 Science Panel completed its research in 2013, finding likely connections between PFOA and high cholesterol, ulcerative colitis, pregnancy-induced hypertension, thyroid disease, testicular cancer, and kidney cancer.

179. Beginning in 2013, DuPont replaced its production and use of PFOA with GenX chemicals.

180. GenX is the trade name for the short-chain PFAS chemicals, including hexafluoropropylene oxide dimer acid, that allow for the creation of fluoropolymers without PFOA.

181. DuPont first began generating GenX in or around 1980, but it remained a chemical byproduct of other manufacturing processes until the 2010s.

182. While DuPont, in a 2010 marketing brochure, touted GenX as having "a favorable toxicological profile," studies have shown that exposure to GenX has negative health effects, suggestive of cancer, on the kidney, blood, immune system, developing fetuses, and especially in the liver following oral exposure. Indeed, as discussed above, based on continuing human health effects assessment research for GenX chemicals since 2018, the EPA has recently further lowered the human health toxicity values for GenX to a more protective standard.

183. Further, like PFOA and other PFAS compounds, GenX is persistent in the environment, not readily biodegradable, and mobile in the presence of water.

184. DuPont acknowledged in the same brochure referenced above that GenX "is chemically stable and, if released, would be environmentally persistent."

185. Following the 2015 Chemours Separation and Spin Transaction, Chemours took over production of legacy DuPont PFAS chemistry, including GenX.

186. Like DuPont, Chemours has, since 2015, designed, manufactured, marketed, distributed, and sold its PFAS compounds, including GenX, for use in AFFF products.

187. On information and belief, the remaining Defendants also knew, or should have known, that in its intended and common use, PFAS-based AFFF and/or AFFF component products would injure and/or threaten the environment and public health. This information was accessible to each of them, including as part of their ongoing involvement in various trade associations constituted for the purpose of defending the AFFF franchise, including the Firefighting Foam Coalition ("FFFC").

188. Additionally, all Defendants knew or, at a minimum, should have known that their PFAS-based AFFF and/or AFFF component products, given their chemical composition, easily dissolve in water (and indeed the products were designed to be mixed with water and sprayed on the ground), are mobile, resist degradation, and tend to bioaccumulate and biomagnify.

189. Despite their knowledge of the harmful properties of PFAS chemicals, following 3M's withdrawal from the PFOA/PFOS market beginning in or around 2000, DuPont and the other Defendants made renewed commitments to protect their lucrative AFFF lines of business.

190. In response to concerns expressed by the EPA regarding the environmental viability of AFFF, the FFFC was formed in 2001, partly to dispel such concerns. DuPont was a founding member. At least Tyco/Ansul, Chemguard, National Foam, and Dynax are current members.

191. The FFFC lobbied hard for AFFF. At conferences, in journals, and in meetings with the military, the EPA, and other regulators, it repeated a key talking point: only one PFAS chemical, PFOS, had been taken off the market. Thus, the FFFC asserted, since the FFFC members' products did not contain PFOS (but rather PFOA and other PFAS chemicals, which Defendants knew or, at a minimum, should have known were equally harmful to the environment and public health), their products were safe.

192. DuPont and other Defendants eventually transitioned to the use of short-chain fluorotelomers with a maximum of six carbon atoms, claiming those chemicals are safer to environmental and human health.

193. Even if such claims were true, Defendants could have begun much earlier to transition from long-chain to short-chain fluorotelomers. Their failure to avail themselves of what they claim is a feasible alternative to the then-current formulations of PFAS-based AFFF that substantially mitigates the risk of human and environmental harm from AFFF products only confirms that their products based on long-chain fluorotelomers were not reasonably safe for their intended applications.

194. Moreover, effective fluorine-free firefighting foams that do not pose the same risks to human health and the environment as Defendants' products exist and are used in some of the world's largest airports, including London Heathrow, London Gatwick, Copenhagen, Stuttgart, and Dubai, amongst others.

195. All 27 of Australia's airports have been using fluorine-free foams for many years.

196. Indeed, leading fire safety and regulatory experts have opined that there are simply no justifications for continued use of toxic foams given this successful, widespread use of the environmentally safe alternative.

197. According to a report issued by a panel of experts of IPEN, a global network of public interest NGOs dedicated to the reduction of toxic chemicals, fluorine-free firefighting (F3) foams are viable alternatives, and comparable by all measures, to fluorinated AFFF.

198. But unlike fluorinated foams, F3 foams do not pollute the environment indefinitely, or put human or animal health at risk; there is no expensive clean up; remediation costs are negligible or zero; and there are no significant legal and financial liabilities. Public health values such as clean drinking water are not compromised, and, finally, there is no erosion of public confidence in political institutions and government agencies.

199. Defendants failed to adequately research and investigate the design, manufacture, or sale of fluorine-free firefighting foam, or did so and concealed their results. They avoided fluorine-free alternatives to protect their existing, lucrative AFFF lines of business.

200. Defendants' failure to pursue this feasible alternative to PFAS-based AFFF further confirms that their AFFF products were not reasonably safe for their intended applications.

## E. DEFENDANTS' AFFF PRODUCTS HAVE CAUSED (AND CONTINUE TO CAUSE) WIDESPREAD PFAS CONTAMINATION IN AND AROUND SAN DIEGO

201. Defendants' PFAS-based AFFF products have been used for decades at locations and facilities throughout California, including within San Diego and surrounding areas in which City resources and properties are located.

202. Indeed, PFAS-based AFFF and AFFF component products manufactured by Defendants were in use for decades at the Heartland Fire Training Facility in El Cajon, proximate and upgradient to Well 4, a crucial source of City drinking water.

203. PFAS-based AFFF products used and disposed in the ordinary and intended manner at the Heartland Fire Training Facility have created a contaminant plume impacting City resources and properties, including groundwater used by the City for drinking water purposes.

204. The City's sampling and testing of water from Well 4 in June and July of 2019 demonstrated PFAS concentrations in excess of the notification level.

205. More alarming, in September of 2019, PFOA was measured in Well 4 at 69.1 ppt and PFOS was measured at 97.3 ppt. These PFAS concentration were far in excess of DDW's then-mandated response level of 70 ppt for PFOA and PFOS combined.

206. In addition, as a result of DDW's newly instituted response level of 10 ppt for PFOA in February of 2020, testing results in 2020 and early 2021 demonstrated exceedances of the applicable PFOA response levels including: 20.1 ppt in March 2020, 18.7 ppt in May 2020, 18.2 ppt in September 2020, 17.5 ppt in October 2020, and 18.7 ppt in March 2021. While measured concentrations of PFOS during this same period did not exceed the required PFOS response level, they came very close to that level, and far exceeded the required notification levels.

207. Defendants' PFAS-based AFFF products have long been used at other locations in and near San Diego, introducing further contamination into City water systems and natural resources.

208. For example, such products have been used for decades in firefighting training exercises at the San Diego International Airport and at military bases, such as Naval Air Station ("NAS") North Island, Naval Base Point Loma, Camp Pendleton, Naval Base Coronado, and others.

209. During routine training exercises, PFAS-based AFFF was sprayed directly on the ground and/or tarmac at fire training areas located within these airports, military bases, and firefighting training grounds, allowing PFAS to travel to the surrounding groundwater, to run off to nearby surface waters, to enter the City's stormwater and wastewater systems, and to cause widespread contamination, including of various City water systems.

210. Additional releases of AFFF have occurred at these locations, through testing of equipment and other incidental releases in hangars, fire stations, and related areas.

211. On information and belief, each of the locations identified in this section as known or likely point-sources of PFAS contamination, housed thousands of gallons of AFFF concentrate manufactured by Defendants, stored in buckets, drums, tankers, tanks, and sprinkler systems.

212. The use of AFFF for training purposes at these locations included suppressing fires and explosions on the ground, as well as coating runways in anticipation of difficult landings, all of which resulted in acres of foam-covered soil and blanketed wreckages.

213. On information and belief, PFAS-based AFFF was also used at numerous other locations in and near San Diego, including at other airports, helipads, fire stations, and industrial facilities.

214. During firefighting and firefighting training exercises at or near these and other sites, PFAS-based AFFF was likewise sprayed, per its intended use, directly on or near the ground and into the air, causing it to be disposed, spilled, and otherwise discharged into the environment.

215. These activities, at the locations identified and others, resulted in discharges or releases of PFAS from Defendants' AFFF products into nearby surface waters, groundwater, soil, and air, as well as water infrastructure owned, operated, and/or maintained by the City, including its drinking water supplies, stormwater system, and wastewater treatment works.

216. In short, the normal, intended, and foreseeable manner of storage, use, and disposal of Defendants' AFFF products directly resulted in the discharge or release of PFAS into, onto, and near the City's environmental and infrastructural resources and properties, causing injury to the City.

217. Upon information and belief, PFAS-based AFFF and/or AFFF component products designed, manufactured, marketed, provided, supplied, sold, and/or distributed by each Defendant were discharged or released into the environment at or from the locations identified above and other sites referenced herein.

218. The instructions, labels and/or material safety data sheets that Defendants provided with their AFFF and/or AFFF component products, if any, during the times relevant to the claims in this Complaint did not fully or sufficiently describe the human and animal health and environmental hazards of PFAS-based AFFF about which Defendants knew or should have known.

219. The instructions, labels and/or material safety data sheets that Defendants provided with their AFFF and/or AFFF component products, if any, during the times relevant to the claims in this Complaint did not provide appropriate warnings and instructions concerning the

environmentally safe use and disposal of PFAS-based AFFF that were known or should have been known to Defendants.

220. The instructions, labels and/or material safety data sheets that Defendants provided with their AFFF and/or AFFF component products, if any, during the times relevant to the claims in this Complaint did not provide appropriate instructions regarding how to design a firefighting testing site, or what precautions are necessary to take at such testing sites, in a manner that would potentially eliminate or limit the release of PFAS into the environment, even though the hazards of failing to appropriately contain PFAS were known or should have been known to Defendants.

221. For example, instructions to install a liner under a testing area or outfitting area test-sites with appropriate water filtration systems could have significantly contained the spread of PFAS into the environment. Defendants knew this, but failed to warn or instruct anyone that their products should only be stored, used, and disposed in conjunction with an effective liner or catch basin, or water filtration system capable of removing PFAS before it could contaminate natural resources and water infrastructure.

222. The instructions, labels and/or material safety data sheets that Defendants provided with their AFFF and/or AFFF component products, if any, during the times relevant to the claims in this Complaint did not provide appropriate warnings of potential pollution of groundwater, surface waters, or municipal water systems with PFAS nor advised the AFFF user to install appropriate water filtration devices to protect the City's resources and properties, even though Defendants knew or should have known about the inevitability of groundwater, surface water, air, and soil contamination through the ordinary and intended use of their PFAS-based AFFF products and consequent adverse effects.

223. As a result, PFAS contamination attributable to the use and disposal of Defendants' PFAS-based AFFF products now afflicts City resources and properties, including without limitation water conveyed and discharged through municipal stormwater systems, drinking water supply systems, wastewater treatment works, and surface waters in and near San Diego.

224. The City has documented the presence of PFAS contamination in Well 4, as alleged above, as well as other municipal monitoring wells, alluvial wells, and in stormwater effluent.

225. PFAS contaminants are inevitably also present in the City's other water infrastructure and other natural resources, including surface waters to which the City's water systems discharge. Indeed, given the mobility and persistence of PFAS compounds, these contaminants have entered the City's stormwater system, overseen and managed by the City pursuant to its MS4 discharge permit, and continually recirculate through storm events.

226. Similarly, PFAS constituents have been detected in the City's wastewater treatment systems, including wastewater effluent from Point Loma Wastewater Treatment Plant and South Bay Water Reclamation Plant, as well as recycled water effluent at both plants.

227. PFAS contaminants have also been detected in surface waters, sediments, and other natural resources in and near San Diego, including San Diego Bay.

228. The City has already incurred significant costs in connection with, among other things, monitoring and analyzing PFAS contamination in City resources and properties, responding to PFAS detections in Well 4 and other resources, notifying and educating the public with respect to PFAS impacts in the water supply, and designing, studying, and preparing for implementation of large-scale water quality improvement projects that will address contamination of municipal water systems, including the Pure Water Program.

229. The Pure Water Program, a multi-year, multi-billion-dollar water purification and reuse/recycling program, will provide one-third of the City's water supply by 2035. The facilities constructed to implement the Program will purify non-potable water, converting it into safe, high-quality drinking water, by treating it across five steps: ozonation, biological activated carbon filtration, membrane filtration, reverse osmosis, and ultraviolet light with advanced oxidation.

230. PFAS known to occur in non-potable water sources utilized in the Pure Water Program will be eliminated as a result of these treatment steps.

231. The Pure Water Program is intended to and will substantially benefit the public health, including by removing PFAS contaminants from water supplies, among other things.

232. Moreover, the City's obligations under state and impending federal environmental regulations to identify, monitor, assess, analyze, and prevent, mitigate, remove, or remediate PFAS

contamination of its water infrastructure and other resources and properties are substantial and impose significant costs on the City.

233. PFAS contamination attributable to AFFF threatens the health of San Diego residents and the viability of San Diego's ecosystems, resulting in substantial impairment of public use and enjoyment of natural resources now burdened with PFAS.

234. In short, the City and the People have suffered and will continue to suffer significant injuries as a result of Defendants' conduct.

## V. CAUSES OF ACTION

### FIRST CAUSE OF ACTION

### PUBLIC NUISANCE – ABATEMENT

**Cal. Civ. Proc. § 731**

235. The People reallege and reaffirm each and every allegation set forth in paragraphs 1 through 234 as if fully restated in this cause of action.

236. The People assert this cause of action pursuant to California Code of Civil Procedure, § 731, to abate a public nuisance as defined in California Civil Code, § 3480.

237. Defendants designed, manufactured, distributed, marketed, promoted, and sold PFAS-based AFFF products and/or AFFF component products in a manner that created or contributed to the creation or maintenance of a public nuisance that is harmful to health and obstructs the free use of natural resources and the City's water systems.

238. Defendants designed, manufactured, marketed, distributed, promoted, and sold their PFAS-based AFFF products and/or AFFF component products with knowledge that they inevitably and foreseeably caused environmental contamination when used as intended.

239. Defendants knew or should have known that their PFAS-based AFFF products and/or AFFF component products would inevitably end up in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City when used as intended, including in and around San Diego.

240. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City annoys, injures, and endangers the comfort, repose, health, and safety of others.

241. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City significantly interferes with and obstructs the public's free use and comfortable enjoyment of those resources and properties for commerce, navigation, fishing, recreation, and aesthetic enjoyment, and for other beneficial uses and purposes.

242. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City is injurious to human, animal, and environmental health.

243. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City interferes with the People's interest in a healthy and ecologically sound environment and the public health.

244. An ordinary person would be reasonably annoyed or disturbed by the presence of toxic PFAS that endanger the health of fish, animals, and humans and degrade water quality and marine habitats as well as air, soils, and sediments.

245. The seriousness of the environmental and human health risk far outweighs any social utility of Defendants' conduct in designing, manufacturing, marketing, distributing, promoting, and selling PFAS-based AFFF products and AFFF component products and concealing the dangers posed to human health and the environment.

246. The rights, interests, and inconvenience to the People far outweigh the rights, interests, and inconvenience to Defendants, which have profited heavily from the manufacture and sale of PFAS-based AFFF products and AFFF component products.

247. Defendants' conduct caused and continues to cause harm to the People.

248. The People have suffered and will continue to suffer injury as a result of Defendants' conduct, including deprivation of use and enjoyment of natural resources and City water systems impaired or contaminated by PFAS.

249. Defendants knew or should have known that the manufacture, promotion, sale, distribution, and use of their PFAS-based AFFF products and AFFF component products would cause contamination of the natural environment in and near San Diego.

250. Defendants knew or should have known that their PFAS-based AFFF and AFFF component products would cause contamination of City water systems and waterbodies, degrade fresh water and marine habitats, endanger animals, and contaminate air, soils, and sediments in and near San Diego.

251. In addition, Defendants knew or should have known that their PFAS-based AFFF products and AFFF component products are associated with serious illnesses and cancers in humans and that humans may be exposed to PFAS through ingestion of contaminated drinking water, fish, meat, or other food, breathing contaminated air, and/or dermal contact. As a result, it was foreseeable to Defendants that the People would be exposed to PFAS attributable to the intended use of their AFFF products and AFFF component products through, e.g., drinking and cooking with contaminated water, bathing or swimming in contaminated waters, watering vegetable gardens with contaminated waters, or eating fish and shellfish from contaminated areas.

252. Defendants knew, or should have known, that the PFAS contamination they introduced or caused would seriously and unreasonably interfere with the ordinary comfort, use, and enjoyment of contaminated waterbodies, including waters in and near San Diego.

253. Defendants' conduct in manufacturing, distributing, marketing, promoting, and selling PFAS-based AFFF products and/or AFFF component products, as well as misrepresenting or omitting the dangers those products foreseeably posed, constitutes an unreasonable interference with a right common to the general public, i.e., the right to freely use natural resources and City water systems (including drinking water) without obstruction and health hazard.

254. As a direct and proximate result of Defendants' creation of a public nuisance, the People have suffered, and continue to suffer, significant injuries, including loss of use and enjoyment of natural resources and City water systems and injury to the public health.

255. The People seek an order, pursuant to Cal. Civ. Proc. § 731, requiring Defendants to abate the public nuisance alleged herein.

**SECOND CAUSE OF ACTION**

**PUBLIC NUISANCE – DAMAGES**

**Cal. Civ. Proc § 731**

256. The City realleges and reaffirms the allegations set forth in paragraphs 1 through 234 as if fully stated herein.

257. The City asserts this cause of action pursuant to California Code of Civil Procedure, § 731, to recover damages for losses incurred as a result of Defendants' conduct.

258. The City's property—including its stormwater and wastewater systems, its drinking water supplies and system, and natural resources the City owns or manages, or for which the City has a responsibility, under California law, to protect the integrity or quality—has been injuriously affected by the public nuisance caused or contributed to by Defendants' conduct.

259. Defendants designed, manufactured, distributed, marketed, promoted, and sold PFAS-based AFFF products and/or AFFF component products in a manner that created or contributed to the creation or maintenance of a public nuisance that is harmful to health and obstructs the free use of natural resources and the City's water systems.

260. Defendants designed, manufactured, marketed, distributed, promoted, and sold their PFAS-based AFFF products and/or AFFF component products with knowledge that they inevitably and foreseeably caused environmental contamination when used as intended.

261. Defendants knew or should have known that their PFAS-based AFFF products and/or AFFF component products would inevitably end up in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City when used as intended, including in and around San Diego.

262. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City annoys, injures, and endangers the comfort, repose, health, and safety of others.

263. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City significantly interferes with and obstructs the public's free use and comfortable enjoyment of those resources and properties for commerce, navigation, fishing, recreation, and aesthetic enjoyment, and for other beneficial uses and purposes.

264. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City is injurious to human, animal, and environmental health.

265. Defendants' conduct and the presence of PFAS contamination in the City's water systems, groundwater, waterways, waterbodies, and other natural resources or properties of the City interferes with the City's and its residents' and visitors' interest in a healthy and ecologically sound environment and the public health.

266. An ordinary person would be reasonably annoyed or disturbed by the presence of toxic PFAS that endanger the health of fish, animals, and humans and degrade water quality and marine habitats as well as air, soils, and sediments.

267. The seriousness of the environmental and human health risk far outweighs any social utility of Defendants' conduct in designing, manufacturing, marketing, distributing, promoting, and selling PFAS-based AFFF products and AFFF component products and concealing the dangers posed to human health and the environment.

268. The rights, interests, and inconvenience to the City far outweighs the rights, interests, and inconvenience to Defendants, which have profited heavily from the manufacture and sale of PFAS-based AFFF products and AFFF component products.

269. Defendants' conduct caused and continues to cause harm to the City.

270. The City has suffered and will continue to suffer injury as a result of Defendants' conduct, including incurring costs in connection with the monitoring, assessment, analysis, control,

reduction, and/or elimination of PFAS contamination, including through the taking of remedial measures and response actions, as alleged herein, to prevent PFAS contamination of finished drinking water and to minimize the discharge of PFAS through City stormwater and wastewater systems, among other actions.

271. Defendants knew or should have known that the manufacture, promotion, sale, distribution, and use of their PFAS-based AFFF products and AFFF component products would cause contamination of the natural environment in and near San Diego.

272. Defendants knew or should have known that their PFAS-based AFFF and AFFF component products would cause contamination of City water systems and waterbodies, degrade fresh water and marine habitats, endanger animals, and contaminate air, soils, and sediments in and near San Diego.

273. In addition, Defendants knew or should have known that their PFAS-based AFFF products and AFFF component products are associated with serious illnesses and cancers in humans and that humans may be exposed to PFAS through ingestion of contaminated drinking water, fish, meat, or other food, breathing contaminated air, and/or dermal contact. As a result, it was foreseeable to Defendants that City residents would be exposed to PFAS attributable to the intended use of their AFFF products and AFFF component products through, e.g., drinking and cooking with contaminated water, bathing and swimming in contaminated waters, watering vegetable gardens with contaminated waters, or eating fish and shellfish from contaminated areas.

274. Defendants knew, or should have known, that the PFAS contamination they introduced or caused would seriously and unreasonably interfere with the ordinary comfort, use, and enjoyment of contaminated waterbodies, including waters in and near San Diego.

275. Defendants' conduct in manufacturing, distributing, marketing, promoting, and selling PFAS-based AFFF products and/or AFFF component products, as well as misrepresenting or omitting the dangers those products foreseeably posed, constitutes an unreasonable interference with a right common to the general public, i.e., the right to freely use natural resources and City water systems (including drinking water) without obstruction and health hazard.

276. As a direct and proximate result of Defendants' creation of a public nuisance, the City has suffered, and continues to suffer, significant injuries, including incurring substantial past, current, and anticipated costs to monitor, assess, analyze, control, reduce, and/or eliminate PFAS contamination, including through the taking of remedial measures and response actions, as alleged herein, to prevent PFAS contamination of finished drinking water and to minimize the discharge of PFAS through City stormwater and wastewater systems, among other actions.

277. The City seeks recovery of all damages available under law.

**THIRD CAUSE OF ACTION**

**DEFECTIVE DESIGN**

278. The City realleges and reaffirms the allegations set forth in paragraphs 1 through 234 as if fully stated herein.

279. The City asserts this cause of action in its governmental capacity, including pursuant to its police powers to prevent and abate pollution of natural resources and hazards to the public health, safety, and welfare, and to the environment, and in its proprietary capacity, as owner, manager, and operator of the City's drinking water, stormwater, wastewater, and other water systems.

280. At all relevant times, Defendants were in the business of designing, engineering, manufacturing, developing, marketing, and selling PFAS-based AFFF products and AFFF component products.

281. Defendants' PFAS-based AFFF products and AFFF component products were not reasonably safe as designed at the time the products left Defendants' control.

282. The toxicity, solubility, volatility, persistence, bioaccumulative tendency, and inability of PFAS compounds to be contained rendered Defendants' PFAS-based AFFF products and AFFF component products unreasonably dangerous at all times.

283. Defendants' PFAS-based AFFF products and AFFF component products were unsafe as designed.

284. Due to their toxicity, persistence, volatility, solubility, and inability to be contained, among other things, Defendants knew their PFAS products were not safe at the time they were

manufactured because, even when used as intended, such products would inevitably produce significant environmental contamination.

285. Defendants knew or should have known their PFAS-based AFFF products and AFFF component products were unsafe to an extent beyond that which would be contemplated by an ordinary person because of the overwhelming seriousness of creating pervasive environmental contamination, especially of groundwater and surface waters, which serve as drinking water supplies, in San Diego and beyond.

286. Defendants designed, manufactured, distributed, sold, and promoted PFAS-based AFFF products and AFFF component products despite such knowledge in order to maximize their profits despite the known harm.

287. At all times relevant to this action, feasible alternatives to PFAS-based AFFF products were available to Defendants, which could have eliminated, reduced, or mitigated the unreasonable dangers and hazards posed by the AFFF products as designed.

288. Any utility allegedly provided by the use of PFAS-based AFFF products and AFFF component products is greatly outweighed by the risks and dangers associated with their use.

289. The PFAS-based AFFF products and AFFF component products were placed in the stream of commerce and sold by Defendants in a defective and unreasonably dangerous condition in that they were toxic, persistent, bioaccumulative, water- and fat-soluble, and volatile (i.e., inevitably escaping their ordinary and intended applications), which resulted in contamination of waterways, wildlife, drinking water supplies, and water infrastructure, including within and around San Diego.

290. The PFAS compounds released from Defendants' AFFF products reached the City's water infrastructure, groundwater, surface waters, and other resources and properties without any substantial change in condition and were in the same condition at the time of the alleged injury to the City's resources and properties.

291. It was foreseeable to Defendants or a reasonable manufacturer that the PFAS would reach the City's water infrastructure, groundwater, surface waters, and other resources and properties.

292. Contamination of the City's water infrastructure, groundwater, surface waters, and other resources and properties occurred because of the defective design and manufacture of the PFAS-based AFFF products and AFFF component products.

293. Defendants' PFAS-based AFFF products and AFFF component products caused and continue to cause injury to the City.

294. Defendants are under a continuing duty to act to correct and remediate the injuries their conduct has introduced, and to warn the City and the public about the human and environmental risks posed by its PFAS products, and each day on which they fail to do so constitutes a new and ongoing injury to the City.

295. The City has suffered and will continue to suffer damages in amounts to be proven at trial.

296. Defendants are strictly liable for all damages arising out of their defectively designed PFAS-based AFFF products and AFFF component products.

**FOURTH CAUSE OF ACTION**

**FAILURE TO WARN**

297. The City realleges and reaffirms the allegations set forth in paragraphs 1 through 234 as if fully stated herein.

298. The City asserts this cause of action in its governmental capacity, including pursuant to its police powers to prevent and abate pollution of natural resources and hazards to the public health, safety, and welfare, and to the environment, and in its proprietary capacity, as owner, manager, and operator of the City's drinking water, stormwater, wastewater, and other water systems.

299. At all relevant times, Defendants were in the business of designing, engineering, manufacturing, developing, marketing, and selling PFAS-based AFFF products and AFFF component products.

300. Defendants' PFAS-based AFFF products and AFFF component products were not reasonably safe because they lacked adequate warnings at the time the products left Defendants' control.

301. At the time Defendants designed, manufactured, distributed, sold, and promoted their PFAS-based AFFF products and AFFF component products, Defendants knew or should have known that, even when used as intended, such products would inevitably and foreseeably produce significant environmental contamination.

302. Despite Defendants' knowledge, Defendants failed to provide adequate warnings that their PFAS-based AFFF products and AFFF component products would become a pervasive contaminant and contaminate drinking water supplies, waterways, and municipal water systems, including in and around San Diego.

303. Defendants could have warned of this certainty but intentionally concealed the certainty of contamination and pollution in order to maximize profits.

304. Defendants concealed the dangers of PFAS and PFAS-based products after they designed, manufactured, distributed, promoted, and sold them, and did not issue adequate warnings or instructions to those who had previously purchased their products, and thereafter continued to design, manufacture, distribute, promote, and sell PFAS-based products without adequate warnings or instructions.

305. Without adequate warnings or instructions, Defendants' PFAS-based AFFF products and AFFF component products were unsafe to an extent beyond that which would be contemplated by an ordinary person.

306. Defendants knowingly failed to issue warnings or instructions concerning the dangers of PFAS and their PFAS-based products in the manner that a reasonably prudent manufacturer would act in the same or similar circumstances.

307. The PFAS-based AFFF products and AFFF component products were placed in the stream of commerce and sold by Defendants in a defective and unreasonably dangerous condition in that their design failed to include warnings or instructions sufficient and necessary for the safe and proper use and disposal of the products.

308. The PFAS compounds released from Defendants' AFFF products reached the City's water infrastructure, groundwater, surface waters, and other resources and properties without any substantial change in condition and were in the same condition at the time of the alleged injury to

the City's water systems, waters, and other resources and properties.

309. It was foreseeable to Defendants or a reasonable manufacturer that the PFAS would reach the City's water infrastructure, groundwater, surface waters, and other resources and properties.

310. Contamination of the City's water infrastructure, groundwater, surface waters, and other resources and properties occurred because of the defective PFAS-based AFFF products and AFFF component products, in that to be non-defective and reasonably safe for use, the products should have contained or been accompanied by a warning as to their toxicity, persistence, bioaccumulativity, solubility and volatility.

311. Further, such contamination occurred because of Defendants' failure to adequately warn or instruct their customers as to proper disposal techniques and safeguards necessary to prevent environmental contamination resulting from the ordinary use of such products.

312. Defendants' PFAS-based AFFF products and AFFF component products caused and continue to cause injury to the City.

313. Defendants are under a continuing duty to act to correct and remediate the injuries their conduct has introduced, and to warn the City and the public about the human and environmental risks posed by its products, and each day on which they fail to do so constitutes a new and ongoing injury to the City.

314. The City has suffered and will continue to suffer damages in amounts to be proven at trial.

315. Defendants are strictly liable for all damages arising out of their failure to provide adequate warnings and instructions.

**FIFTH CAUSE OF ACTION**

**TRESPASS**

316. The City realleges and reaffirms the allegations set forth in paragraphs 1 through 234 as if fully stated herein.

317. The City asserts this cause of action in its governmental capacity, including pursuant to its police powers to prevent and abate pollution of natural resources and hazards to the public

health, safety, and welfare, and to the environment, and in its proprietary capacity, as owner, manager, and operator of the City's drinking water, stormwater, wastewater, and other water systems.

318. As alleged above, Defendants designed, manufactured, distributed, marketed, and promoted PFAS-based AFFF products and AFFF component products in a manner that ensured that PFAS compounds would invade the City's stormwater system, drinking water supplies and drinking water systems, wastewater treatment works, waterbodies, groundwater, and other resources and properties.

319. As a result of such invasion, the City's stormwater system, drinking water supplies and drinking water systems, wastewater treatment works, waterways and waterbodies, groundwater, and other resources and properties which the City owns, operates, and/or maintains suffer contamination with toxic PFAS.

320. Defendants knew that it was a substantial certainty that PFAS would end up in the City's water infrastructure, groundwater, surface waters, and other resources and properties, when Defendants' products were used as intended, including in and near San Diego.

321. Defendants acted intentionally while knowing, or having reason to know, that Defendants did not have authorization to act in a manner that would cause injury to the City's water infrastructure, groundwater, surface waters, and other resources and properties.

322. Defendants' conduct caused and will continue to cause injury to the City.

323. Defendants are under a continuing duty to act to correct and remediate the injuries their conduct has introduced, and each day on which they fail to do so constitutes a new and ongoing injury to the City.

324. As a direct and proximate result of Defendants' trespass, the City has suffered, and continues to suffer, monetary damages to be proven at trial.

## SIXTH CAUSE OF ACTION

## NEGLIGENCE

325. The City realleges and reaffirms the allegations set forth in paragraphs 1 through 234 as if fully stated herein.

326. The City asserts this cause of action in its governmental capacity, including pursuant to its police powers to prevent and abate pollution of natural resources and hazards to the public health, safety, and welfare, and to the environment, and in its proprietary capacity, as owner, manager, and operator of the City's drinking water, stormwater, wastewater, and other water systems.

327. Defendants had a duty of care to protect others against unreasonable risks resulting from the use or disposal of their PFAS-based AFFF products and AFFF component products.

328. Defendants breached their duty by failing to conform to the requisite standard of care when they negligently, carelessly, and recklessly designed, manufactured, formulated, handled, stored, labeled, instructed, controlled (or failed to control), tested (or failed to test), marketed, sold, and otherwise distributed toxic PFAS-based products that contaminated the City's water infrastructure, groundwater, surface waters, and other resources and properties.

329. Defendants failed to exercise ordinary care because a reasonably careful company that learned of its product's toxicity would not manufacture that product or would warn of its properties.

330. Defendants failed to exercise ordinary care because a reasonably careful company that learned that its product could not be contained during normal production and use would not continue to manufacture that product or would warn of its dangers.

331. Defendants failed to exercise ordinary care because a reasonably careful company would not continue to manufacture and market or promote PFAS-based AFFF products in mass quantities and to the extent that Defendants manufactured, marketed, and promoted them.

332. There is a proximate causal connection between Defendants' breach of their duty of care and the resulting harm to the City's water infrastructure, groundwater, surface waters, and other resources and properties.

333. Defendants' negligence caused and continues to cause injury to the City.

334. Defendants are under a continuing duty to act to correct and remediate the injuries their conduct has introduced, and to warn the City and the public about the human and environmental

risks posed by their products, and each day on which they fail to do so constitutes a new and ongoing injury to the City.

335. The City has suffered and will continue to suffer damages in amounts to be proven at trial.

## VI. JURY TRIAL DEMAND

Plaintiffs respectfully request trial by jury on all claims so triable.

## VII. PRAYER FOR RELIEF

Plaintiffs pray for judgment against Defendants, jointly and severally, as follows:

A. An order in favor of the People requiring Defendants to abate the public nuisance alleged herein, pursuant to Cal. Civ. Proc. § 731;

B. Damages to the City according to proof, including all past, current, and future costs to monitor, assess, analyze, control, reduce, and/or eliminate PFAS contamination of City drinking water supplies and drinking water systems, stormwater and wastewater systems, and natural resources owned, managed, and/or maintained by the City, and to protect the public health;

C. Any other damages, including punitive or exemplary damages, as permitted by law;

D. Litigation costs and attorneys' fees as permitted by law;

E. Pre-judgment and post-judgment interest on all monies awarded, as permitted by law; and

F. Such other and further relief as the Court deems just and proper.

Dated: May 11, 2022

**CITY OF SAN DIEGO**

By: */s/ Mara W. Elliott*

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