

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA
OCALA DIVISION**

DAVID BATTISTI; REGINA SAUERACKER;
MARY ANN BENSON; SUSAN SCHELL;
CAROL SMITH and GERALD SMITH, her
husband; and ANITA PRINGLE and DAVID
PRINGLE, her husband; for themselves and on
behalf of all others similarly situated,

Plaintiffs,

v.

THE 3M COMPANY (f/k/a Minnesota
Mining and Manufacturing, Co.); TYCO FIRE
PRODUCTS L.P., as successor-in-interest to
THE ANSUL COMPANY; BUCKEYE FIRE
EQUIPMENT CO.; CHEMGUARD, INC.;
NATIONAL FOAM, INC.; KIDDE FIRE
FIGHTING, INC. (f/k/a CHUBB NATIONAL
FOAM, INC. f/k/a NATIONAL FOAM,
INC.), individually and as successor in interest
to NATIONAL FOAM, INC.; KIDDE PLC,
INC. (f/k/a WILLIAMS US INC. f/k/a
WILLIAMS HOLDINGS, INC.), individually
and as successor in interest to NATIONAL
FOAM, INC.; KIDDE-FENWAL, INC. (f/k/a
FENWAL INC.), individually and as
successor-in-interest to NATIONAL FOAM,
INC.; and UTC FIRE & SECURITY
AMERICAS CORPORATION, INC. (f/k/a
GE INTERLOGIX, INC.), individually and as
successor-in-interest to NATIONAL FOAM,
INC.,

Defendants,

CASE NO.:

**CLASS ACTION COMPLAINT WITH
INDIVIDUAL CLAIMS AND DEMAND FOR JURY TRIAL**

TABLE OF CONTENTS

I. INTRODUCTION.....1

II. JURISDICTION AND VENUE.....4

III. THE PARTIES4

 Plaintiffs..... 4

 Defendants9

IV. FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION14

 A. Manufacture and Use of Aqueous Film-Forming Foam (“AFFF”).....14

 B. Health Advisories and Health Effects relating to Perfluorooctane Sulfonate (“PFOS”) and Perfluorooctanoic Acid (“PFOA”).....17

 C. Defendants’ Knowledge of the Threats to Public Health and the Environment Posed by PFOS and PFOA21

 D. AFFF Usage and the Resulting PFOS and PFOA Contamination of the Florida State Fire College.....31

 E. The Plaintiffs and Putative Class Members’ Exposures to PFOS and PFOA and Damages 32

 F. AFFF Containing PFOS and PFOA is Fungible and Commingled in the Groundwater 33

 G. Market Share Liability, Alternative Liability, Concert of Action, Enterprise Liability 34

V. CLASS ALLEGATIONS35

 A. Class Definition36

 B. Numerosity and Ascertainability37

 C. Commonality.....38

 D. Typicality38

E. Adequacy of Representation..... 39

VI. CAUSES OF ACTION40

A. Count I – Negligence and Gross Negligence.....40

B. Count II – Strict Liability.....47

C. Count III – Medical Monitoring52

D. Count IV – Loss of Consortium Claim.....56

VII. PUNITIVE DAMAGES57

VIII. PRAYER FOR RELIEF59

IX. DEMAND FOR JURY TRIAL60

**CLASS ACTION COMPLAINT WITH
INDIVIDUAL CLAIMS AND DEMAND FOR JURY TRIAL**

Plaintiffs, DAVID BATTISTI, REGINA SAUERACKER, MARY ANN BENSON, SUSAN SCHELL, CAROL SMITH and GERALD SMITH, her husband, and ANITA PRINGLE and DAVID PRINGLE, her husband, for themselves and on behalf of all others similarly situated (collectively “Plaintiffs”), by and through their undersigned counsel, hereby file this Class Action Complaint with Individual Claims and Demand for Jury Trial, and make these allegations based on information and belief against the Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co.); TYCO FIRE PRODUCTS L.P., as successor-in-interest to THE ANSUL COMPANY; BUCKEYE FIRE EQUIPMENT CO.; CHEMGUARD, INC.; NATIONAL FOAM, INC.; KIDDE FIRE FIGHTING, INC. (f/k/a CHUBB NATIONAL FOAM, INC. f/k/a NATIONAL FOAM, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE PLC, INC. (f/k/a WILLIAMS US INC. f/k/a WILLIAMS HOLDINGS, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE-FENWAL, INC. (f/k/a FENWAL INC.), individually and as successor-in-interest to NATIONAL FOAM, INC.; and UTC FIRE & SECURITY AMERICAS CORPORATION, INC. (f/k/a GE INTERLOGIX, INC.), individually and as successor-in-interest to NATIONAL FOAM, INC. (collectively “Defendants”), and allege as follows:

I. INTRODUCTION

1. The Plaintiffs, for themselves and on behalf of a Class of similarly-situated individuals, bring this action for damages sustained to their person and for medical monitoring resulting from exposure to aqueous film-forming foams (“AFFF”) containing the toxic chemicals perfluorooctane sulfonate (“PFOS”) and/or perfluorooctanoic acid (“PFOA”) and/or from exposure to groundwater, surface water, and affected areas contaminated with PFOS and/or PFOA

from AFFF products that were manufactured, designed, sold, supplied and/or distributed by each of the above-named Defendants, individually or through their predecessors or subsidiaries.

2. PFOS and PFOA are fluorosurfactants that repel oil, grease, and water. PFOS and PFOA, and/or their precursors, are or were components of the Defendants' AFFF products, which are firefighting suppressant agents used in training and firefighting activities for fighting Class B fires. Class B fires include fires involving hydrocarbon fuels such as petroleum or other flammable liquids.

3. The Plaintiffs and the putative Class represent numerous firefighter instructors, trainees, staff members, and other individuals who worked and/or trained at the Florida State Fire College located at 11655 NW Gainesville Road, Ocala, Florida 34482 ("Fire College").

4. On or about August 2018, the Florida Department of Environmental Protection Agency ("Florida DEP"), began testing the wells at the Fire College and found significantly elevated levels of PFOS and PFOA greater than the national average as a result of contamination of the Fire College's water supply. The PFOS and PFOA levels vastly exceed the United States Environmental Protection Agency's ("EPA") health advisory limit 0.07 parts per billion (ppb) or 70 parts per trillion (ppt). Prior to the Florida DEP's findings, there was no notice provided to the Plaintiffs and putative Class members that the Fire College's water supplies were contaminated with PFOS and PFOA.

5. Over the course of the past several decades, the Plaintiffs and putative Class members routinely used and were exposed to the Defendants' AFFF products and/or were exposed to PFOS- and PFOA- contaminated water at the Fire College where the Defendants' AFFF products were used and stored resulting in significant personal injuries and the need for medical monitoring.

6. PFOS and PFOA are highly toxic and carcinogenic chemicals. The Defendants knew or should have known that PFOS and PFOA are persistent when released into the environment and present significant risks to human health and the environment.

7. Nevertheless, the Defendants knowingly and willfully manufactured, designed, marketed, sold, and distributed AFFF products containing PFOS and/or PFOA when they knew or reasonably should have known that these harmful compounds would be released into the air, soil, and groundwater during firefighting training exercises and in firefighting emergencies, and would threaten the health and welfare of firefighters and other individuals exposed to these dangerous and hazardous chemicals.

8. Defendants' PFOS- and/or PFOA- containing AFFF products were used by Plaintiffs, and others at the Fire College, in their intended manner, without significant change in the products' condition. Being unaware of the dangerous properties of the Defendants' AFFF products, Plaintiffs relied on Defendants' instructions as to proper methods of handling the products. Plaintiffs' consumption, inhalation or dermal absorption of PFOS and/or PFOA from Defendants' AFFF products caused Plaintiffs to develop numerous serious medical conditions, including, but not limited to, thyroid disease, kidney cancer and/or end-stage kidney disease, ulcerative colitis, and hypercholesterolemia.

9. Through this action, the Plaintiffs, for themselves and on behalf of the putative Class, seek to recover compensatory and punitive damages arising out of the permanent and significant damages sustained as a direct result of their exposure to the Defendants' PFOS- and PFOA- containing AFFF products and/or to PFOS- and/or PFOA- contaminated groundwater, surface water, and affected areas from the use and/or storage of the Defendants' AFFF products at

the Fire College. Plaintiffs, for themselves and on behalf of the putative Class, also seek an order directing the Defendants to fund and support a medical monitoring program.

II. JURISDICTION AND VENUE

10. This Complaint was filed as an original action in this District.

11. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1332 (a)(1) and (d)(2) and the Class Action Fairness Act (“CAFA”). *See* 28 U.S.C. § 1711, *et seq.* The Plaintiffs and each of the Defendants in this action are citizens of different states and the amount in controversy exceeds five million dollars (\$5,000,000.00), exclusive of interest and costs.

12. The Court has supplemental jurisdiction over Plaintiffs’ state law claim pursuant to 28 U.S.C. § 1367.

13. This Court has personal jurisdiction over Defendants by virtue of each Defendants’ regular and systematic contacts with the State of Florida, including, among other things, purposefully marketing, selling and/or distributing their AFFF products within the State of Florida, and because they have the requisite minimum contacts with the State necessary to constitutionally permit the Court to exercise jurisdiction.

14. Venue is proper in this District pursuant to 28 U.S.C. § 1391 and 18 U.S.C. §1965, because a substantial part of the events or omissions giving rise to the claim occurred in this District and because the subject contaminated site that is the subject of this action is located within this District.

III. PARTIES

A. Plaintiffs and Class Representatives

15. Plaintiff David Battisti is a resident of Tamarac, Florida, who currently resides at 6940 NW 83rd Terrace, Tamarac, Florida 33321. At all material times, Plaintiff David Battisti

worked as a firefighter in or around Ocala, Florida and worked as a firefighter instructor at the Fire College in Ocala, Florida. During Mr. Battisti's employment as a firefighter and firefighter instructor, he was exposed to significantly elevated levels of PFOS and PFOA in their concentrated form as a result of regular contact with the Defendants' AFFF products and through PFOS and PFOA having contaminated the wells at the Fire College, including, but not limited to, through the accumulation of PFOS and PFOA in the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains.

16. Plaintiff David Battisti has suffered from thyroid disease as a direct and proximate result of his exposure to PFOA and PFOS and is at an increased risk of developing several health effects, including but not limited to effects on the liver and immune system, kidney cancer, testicular cancer, high cholesterol, colitis, and autoimmune diseases.

17. Plaintiff David Battisti has a legitimate fear of developing debilitating injuries as a result of his exposure to PFOS and PFOA, including but not limited to effects on the liver and immune system, high cholesterol levels, kidney cancer, testicular cancer, colitis, and autoimmune diseases.

18. Plaintiff Regina Saueracker is a resident of Ocala, Florida, who has resided at all material times at 4725 SW 110th Street, Ocala, Florida 34476. At all material times, Plaintiff Regina Saueracker worked as an operations management consultant at the Fire College in Ocala, Florida. During Plaintiff Regina Saueracker's employment as an operations management consultant, she was exposed to significantly elevated levels of PFOS and PFOA in the Defendants' AFFF products through contamination in the wells at the Fire College, including, but not limited to, through the accumulation of PFOS and PFOA in the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains.

19. Plaintiff Regina Saueracker has suffered from thyroid disease, kidney disease, including bilateral renal masses, and ulcerative colitis as a direct result of her exposure to PFOS and PFOA. She is at an increased risk of developing several health effects, including but not limited to effects on the liver and immune system, kidney cancer, breast cancer, high cholesterol, and autoimmune diseases.

20. Plaintiff Regina Saueracker has a legitimate fear of developing debilitating injuries as a result of her exposure to PFOS and PFOA, including but not limited to effects on the liver and immune system, high cholesterol levels, kidney cancer, breast cancer, and autoimmune diseases.

21. Plaintiff Mary Ann Benson is a resident of Ocala, Florida, who has resided at all material times at 3216 SE 54th Circle, Ocala, Florida 33480. At all material times, Plaintiff Mary Ann Benson worked as an administrative assistant at the Fire College in Ocala, Florida. During Plaintiff Mary Ann Benson's employment as an administrative assistant, she was exposed to significantly elevated levels of PFOS and PFOA in the Defendants' AFFF products through contamination in the wells at the Fire College, including, but not limited to, through the accumulation of PFOS and PFOA in the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains.

22. Plaintiff Mary Ann Benson has suffered from thyroid disease and breast cancer as a direct result of her exposure to PFOS and PFOA and is at an increased risk of developing several health effects, including but not limited to effects on the liver and immune system, kidney cancer, testicular cancer, high cholesterol, colitis, and autoimmune diseases.

23. Plaintiff Mary Ann Benson has a legitimate fear of developing debilitating injuries as a result of her exposure to PFOS and PFOA, including but not limited to effects on the liver and immune system, high cholesterol levels, kidney cancer, colitis, and autoimmune diseases.

24. Plaintiff Susan Schell is a resident of Ocala, Florida, who has resided at all material times at 10886 SW 45th Terrace, Ocala, Florida 34476. At all material times, Plaintiff Susan Schell worked at the Fire College in Ocala, Florida. During Plaintiff Susan Schell's employment, she was exposed to significantly elevated levels of PFOS and PFOA in the Defendants' AFFF products through contamination in the wells at the Fire College, including, but not limited to, through the accumulation of PFOS and PFOA in the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains.

25. Plaintiff Susan Schell has suffered from end-stage kidney disease as a direct result of her exposure to PFOS and PFOA and is at an increased risk of developing several health effects, including but not limited to effects on the liver and immune system, kidney cancer, breast cancer, high cholesterol, colitis, and autoimmune diseases.

26. Plaintiff Susan Schell has a legitimate fear of developing debilitating injuries as a result of her exposure to PFOS and PFOA, including but not limited to effects on the liver and immune system, high cholesterol levels, kidney cancer, breast cancer, colitis, and autoimmune diseases.

27. Plaintiff Carol Smith is a resident of Ocala, Florida, who has resided at all material times at 8265 SW 115th Lane, Ocala, Florida 34481. At all material times, Plaintiff Carol Smith worked as a Senior Clerk Registrar at the Florida State Fire College in Ocala, Florida. During Plaintiff Carol Smith's employment, she was exposed to significantly elevated levels of PFOS and PFOA in the Defendants' AFFF products through contamination in the wells at the Fire College, including, but not limited to, through the accumulation of PFOS and PFOA in the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains.

28. Plaintiff Carol Smith has suffered from thyroid disease as a direct result of her exposure to PFOS and PFOA and is at an increased risk of developing several health effects, including but not limited to effects on the liver and immune system, kidney cancer, testicular cancer, high cholesterol, colitis, and autoimmune diseases.

29. Plaintiff Carol Smith has a legitimate fear of developing debilitating injuries as a result of her exposure to PFOS and PFOA, including but not limited to effects on the liver and immune system, high cholesterol levels, kidney cancer, breast cancer, colitis, and autoimmune diseases.

30. Plaintiff Gerald Smith is a resident of Ocala, Florida, who has resided at all material times at 8265 SW 115th Lane, Ocala, Florida 34481. At all times material, Gerald Smith was and is the husband of Carol Smith.

31. Plaintiff Anita Pringle is a resident of Ocala, Florida, who has resided at all material times at 3231 NE 42nd Place, Ocala, Florida 34479. At all material times, Plaintiff Anita Pringle worked as an administrative assistant at the Fire College in Ocala, Florida. During Plaintiff Anita Pringle's employment as an administrative assistant, she was exposed to significantly elevated levels of PFOS and PFOA in the Defendants' AFFF products through contamination in the wells at the Fire College, including, but not limited to, through the accumulation of PFOS and PFOA in the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains.

32. Plaintiff Anita Pringle has suffered from thyroid disease and parathyroid cancer as a direct result of her exposure to PFOA and PFOS and is at an increased risk of developing several health effects, including but not limited to effects on the liver and immune system, kidney cancer, breast cancer, high cholesterol, colitis, and autoimmune diseases.

33. Plaintiff Anita Pringle has a legitimate fear of developing debilitating injuries as a result of her exposure to PFOS and PFOA, including but not limited to effects on the liver and immune system, high cholesterol levels, kidney cancer, breast cancer, colitis, and autoimmune diseases.

34. Plaintiff David Pringle is a resident of Ocala, Florida, who has resided at all material times at 3231 NE 42nd Place, Ocala, Florida 34479. At all material times, David Pringle was and is the husband of Anita Pringle.

35. The proposed class representatives are Plaintiffs, David Battisti, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle. Each of the proposed class representatives, at all times material, have been exposed to greater than normal background levels of PFOS and PFOA as a result of their use and/or consumption, inhalation or dermal absorption of PFOS and/or PFOA from the Defendants' AFFF products. Consequently, they are at an increased risk of developing serious adverse health effects.

B. Defendants

36. Defendant 3M Company (f/k/a Minnesota Mining and Manufacturing Company) ("3M") is a corporation organized and existing under the laws of the state of Delaware, having its principal place of business at 3M Center, St. Paul, Minnesota 55133.

37. Beginning before 1970 and until at least 2002, 3M manufactured, distributed, and sold AFFF containing PFOS.

38. According to 3M, 3M was the only known manufacturer of AFFF containing PFOS and PFOS precursors in the United States. 3M also manufactured PFOA.

39. 3M manufactured and/or distributed and/or sold AFFF foam containing PFOS and/or PFOA which was used at the Fire College.

40. Defendant Tyco Fire Products, L.P. (“Tyco”) is a limited partnership formed in the State of Delaware with its principal place of business at One Stanton Street, Marinette, Wisconsin 54143. Tyco is an indirect subsidiary ultimately wholly owned by Johnson Controls International plc, an Irish public limited company listed on the New York Stock Exchange [NYSE: JCI]. Upon information and belief, Tyco’s partners are Central Sprinkler LLC and Fire Products Holding LLC, whose members are wholly owned by Tyco Fire & Security (US) Management, Inc., which is incorporated in Nevada and its principal place of business is in New Jersey. Accordingly, Tyco is a citizen of Nevada and New Jersey.

41. Tyco is the successor-in-interest of The Ansul Company (“Ansul”), having acquired Ansul in 1990. (Ansul and Tyco (as the successor in interest to Ansul), will hereinafter be collectively referred to as “Tyco/Ansul.”)

42. Beginning in or around 1975, Ansul manufactured and/or distributed and sold AFFF that contained fluorocarbon surfactants containing PFOA. After Tyco acquired Ansul in 1990, Tyco/Ansul continued to manufacture, distribute and sell AFFF that contained fluorocarbon surfactants containing PFOA.

43. Tyco/Ansul manufactured and/or distributed and/or sold AFFF foam containing PFOA which was used at the Fire College.

44. Defendant Buckeye Fire Equipment Company (“Buckeye”) is a foreign corporation organized and existing under the laws of the state of Ohio, with its principal place of business at 110 Kings Road, Kings Mountain, North Carolina 28086.

45. Buckeye manufactured, distributed and/or sold AFFF containing PFOA which was used at the Fire College.

46. Defendant Chemguard, Inc. (“Chemguard”) is a Texas corporation with its

principal place of business in Texas.

47. Beginning in or around 1994, Chemguard began manufacturing AFFF that contained PFOA.

48. Chemguard manufactured and/or distributed and/or sold AFFF foam containing PFOA which was used at the Fire College.

49. Defendant National Foam, Inc. (“National Foam”) is a Delaware corporation, having its principal place of business and corporate headquarters located in Angier, North Carolina.

50. At all times relevant, National Foam designed, manufactured, and sold AFFF products, including, but not limited to, AER-O-Foam XL-3 3%, used in training operations and for emergency fire-fighting situations including at the Fire College.

51. Defendant Kidde Fire Fighting, Inc. (f/k/a Chubb National Foam, Inc. f/k/a National Foam Inc.), is a North Carolina corporation having a principal place of business at 160 Mine Lake Court, Suite 200, Raleigh, North Carolina 27615. At all times relevant, Kidde Fire Fighting, Inc. designed, manufactured and sold AFFF used in training operations and for emergency fire-fighting situations including at the Fire College.

52. Kidde Fire Fighting, Inc., is sued individually, and as successor in interest to National Foam, Inc.

53. Defendant Kidde plc, Inc. (f/k/a Williams US Inc. f/k/a Williams Holdings, Inc.), is a Connecticut corporation having a principal place of business at One Carrier Place, Farmington, Connecticut 06302. At all times relevant, Kidde plc, Inc. designed, manufactured, and sold AFFF used in training operations and for emergency fire-fighting situations including at the Fire College.

54. Kidde plc, Inc., is sued individually, as a successor in interest to National Foam,

Inc.

55. Upon information and belief, Williams Holdings, Inc. was incorporated on October 10, 1987, and later dissolved on December 31, 1990.

56. Upon information and belief, John F. Hannon was the CEO and Secretary of Williams Holdings, Inc. At all times relevant, Williams Holdings, Inc. designed, manufactured, and sold AFFF used in training operations and for emergency fire-fighting situations including at the Fire College.

57. Upon information and belief, Williams Corporation was founded in 1997, and dissolved on October 26, 2000. Upon information and belief, John F. Hannon was the CEO of Williams Corporation, as well as the Treasurer of Kidde Fire Fighting, Inc. prior to the dissolution of Williams Corporation.

58. Upon information and belief, Williams Holdings, Inc., a Delaware corporation, filed as a foreign corporation with the Massachusetts Secretary of State on June 2, 1987.

59. Upon information and belief, John F. Hannon changed the name of Williams Holdings, Inc. to Williams Holdings US, Inc., on February 12, 1998.

60. Upon information and belief, Williams Holdings US, Inc. became Kidde plc, Inc. on November 15, 2000.

61. Williams Holdings, Inc. is named as successor in interest to National Foam, Inc.

62. Defendant Kidde-Fenwal, Inc. (f/k/a Fenwal, Inc.) is a Massachusetts corporation with its principal place of business at 400 Main Street, Ashland, Massachusetts 01721. At all times relevant, Kidde-Fenwal, Inc. designed, manufactured, and sold AFFF used in training operations and for emergency fire-fighting situations including at the Fire College.

63. Upon information and belief, Fenwal, Inc. was incorporated on June 21, 1988, and

later changed its name to Kidde-Fenwal, Inc.

64. Upon information and belief, the Canadian Intellectual Property Office has registered the National Foam trademark to Kidde-Fenwal, Inc., formerly registered to Kidde Fire Fighting, Inc.

65. Kidde-Fenwal, Inc., is sued individually, and as successor in interest to National Foam, Inc.

66. Defendant UTC Fire & Security Americas Corporation, Inc. (f/k/a GE Interlogix, Inc.), is a North Carolina corporation with its principal place of business at 3211 Progress Drive, Lincolnton, North Carolina 28092. At all times relevant, UTC Fire & Security Americas Corporation, Inc. designed, manufactured and sold AFFF used for training operations and fighting fires including at the Fire College.

67. Upon information and belief, Kidde-Fenwal, Inc. is part of the UTC Climate Control & Security unit of United Technologies Corporation.

68. UTC Fire & Security Americas Corporation, Inc., is sued individually, and as successor in interest to National Foam, Inc.

69. National Foam, Inc.; Kidde Fire Fighting, Inc., f/k/a Chubb National Foam, Inc., f/k/a National Foam Inc., individually and as successor in interest to National Foam, Inc.; Kidde plc, Inc., f/k/a Williams US Inc., f/k/a Williams Holdings, Inc., individually and as successor in interest to National Foam, Inc.; Kidde-Fenwal, Inc., individually and as successor in interest to National Foam, Inc.; UTC Fire & Security Americas Corporation, Inc., f/k/a GE Interlogix, Inc.; shall collectively be referred to herein as “National Foam.”

70. At all times relevant to the present litigation, National Foam designed, manufactured, and sold AFFF used in training operations and for emergency fire-fighting

situations at numerous locations throughout the country, including at the Fire College.

71. National Foam and its predecessors have also used the “Angus Fire” trade name and brand name for sales of AFFF in the United States for a number of decades. References to “National Foam” herein shall also refer to AFFF commercially manufactured, marketed and sold under the “Angus” name and “Angus Fire” brand.

IV. FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION

A. Manufacture and Use of Aqueous Film-Forming Foam (“AFFF”)

72. AFFF formulations are chemical mixtures used to extinguish hydrocarbon fuel-based fires.

73. AFFF containing fluorinated surfactants have a better firefighting capability than plain water due to their surface-tension lowering properties- essentially smothering the fire and starving it of its oxygen.

74. However, some fluorinated surfactants have unique properties that cause some of the compounds to not biodegrade and to bioaccumulate, and are toxic to animals and humans.

75. AFFF is a Class-B firefighting foam. It is mixed with water and used to extinguish fires that are difficult to fight, particularly those that involve petroleum or other flammable liquids.

76. AFFF was introduced commercially in the mid-1960s and rapidly became the primary firefighting foam in the U.S. and in many parts of the world.

77. AFFF is synthetically formed by combining fluorine free hydrocarbon foaming agents with surfactants. When mixed with water, the resulting solution produces an aqueous film that spreads across the surface of hydrocarbon fuel. This film provides fire extinguishment and is the source of the designation aqueous film forming foam.

78. The Defendants manufactured AFFF products that contained fluorocarbon surfactants believed to include PFOS, PFOA, and/or certain other perfluorinated compounds (“PFCs”) that degrade into PFOS and PFOA.

79. PFCs are manmade chemicals that do not exist in nature.

80. In the foam industry, concentrates are typically referred to as “3%” or “6%” concentrate, depending on the mixture rate with water. AFFF concentrates contain about 60-90% water and have a fluorine content of about 0.3 – 1.8%.

81. Defendants 3M, Tyco/Ansul, National Foam, Chemguard and Buckeye designed, manufactured, and sold AFFF that was used at the Fire College, including, but not limited to, National Foam’s AER-O-Foam XL-3 3%, used in training operations and for emergency fire-fighting situations.

82. PFCs used in 3M’s AFFF were produced by a unique and patented process known as electrochemical fluorination (“ECF”). The ECF process resulted in a product that contains PFOS, some of which degrades into PFOA.

83. 3M was the only company to manufacture PFOS-containing AFFF.

84. In an attempt to limit liability, 3M opted to stop producing PFOS 2002 because it was aware of the looming chemical exposure and health effects on the public.

85. Similarly, PFOA is a man-made, manufactured chemical not found in nature. PFOA was used to make household and commercial products that resist heat and chemical reactions, and has many uses, including repelling oil, stains, grease, and water.

86. In 1947, 3M began producing PFOA via ECF.

87. In 1951, 3M began selling its PFOA to other chemical companies, including DuPont.

88. Other companies, such as Defendants Tyco/Ansul, Buckeye, National Foam, and Chemguard began manufacturing AFFF using PFOA that they produced themselves or purchased from other companies. Defendants' AFFF was then for use at airports, fire departments and industrial facilities across the nation.

89. The chemical structure of PFOS and PFOA makes them resistant to breakdown or environmental degradation. As a result, they are persistent when released into the environment. Some PFC's, such as PFOS and PFOA, have been found to bioaccumulate in humans and animals. In 2005, the U.S. Department of Health and Human Services found that "human exposure to PFOA and PFOS lead to the buildup of these chemicals in the body."

90. By the early 1960s, 3M knew that PFOS and PFOA were stable, persistent in the environment, and do not degrade.

91. Early studies showed that PFC's accumulated in the human body and were "toxic." 3M studies from the 1970s concluded that PFC's were "even more toxic" than previously believed.

92. Upon information and belief, by the 1970's, 3M knew that its PFC's (PFOA and PFOS) were widely present in the blood of the general U.S. population. Upon information and belief, 3M concealed this knowledge from the public and government regulators.

93. In or about 1977, Tyco/Ansul was also aware of the environmental and toxic concerns of its AFFF and undertook a study and investigation on more environmentally improved AFFF.

94. PFOS and PFOA are readily absorbed after consumption, inhalation or dermal absorption, and it accumulates primarily in the blood stream, kidney, and liver.

95. Because of its toxicity, eight major PFOA manufacturers agreed in 2006 to participate in the EPA's PFOA Stewardship Program. The participating companies made voluntary

commitments to reduce product content and facility emissions of PFOA and related chemicals by 95%, no later than 2010.

96. PFOA can remain in the environment, particularly in water, for many years and can move through air, soil, and into groundwater.

97. Human studies show associations between increased PFOA levels in blood and an increased risk of several health conditions, including high cholesterol levels, changes in thyroid hormone, ulcerative colitis (autoimmune disease), pre-eclampsia (a complication of pregnancy that includes high blood pressure), and kidney and testicular cancer.

98. These injuries can arise months or years after exposure to PFOA.

99. According to the EPA's Lifetime HAs, the adverse health effects observed following exposure to PFOS are the same as those observed with PFOA, meaning injuries associated with PFOS exposure and accumulation similarly manifest themselves months or years after initial exposure.

100. Due to the extreme persistence of PFOS and PFOA in the environment, these chemicals' toxicity, mobility, and bioaccumulation potential pose ongoing and probable adverse effects to human health and the environment.

101. Consumption of elevated levels of PFOS and/or PFOA from contaminated water will lead to elevated serum PFOS and/or PFOA levels with evidence that for every 10 ppt consumed from contaminated water, serum levels increase by 25%, thereby causing a doubling of serum levels at 40 ppt. Once biological uptake occurs, the clinical effect can be proximate to the exposure or following a latency or both.

B. Health Advisories and Health Effects relating to PFOS and PFOA

102. Many parties have studied PFOS and PFOA, sometimes referred to as C8, including a Science Panel formed out of a class action settlement arising from contamination from DuPont's Washington Works located in Wood County, West Virginia.

103. The C8 panel consisted of three epidemiologists specifically tasked with determining whether there was a probable link between PFOA exposure and human diseases. In 2012, the panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy induced hypertension (including preeclampsia), and hypercholesterolemia.

104. The non-cancer health effects of PFOS are the same as PFOA.

105. In the May 2015 "Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS's)," scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, limits on the manufacture and handling of any PFOA containing product, and to develop safe non-fluorinated alternatives to these products to avoid long-term harm to human health and the environment.¹

106. On May 25, 2016, the EPA released a lifetime health advisory (HAs) and health effects support documents for PFOS and PFOA.² See Fed. Register, Vol. 81, No. 101, May 25, 2016. The EPA developed the HAs to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HAs identified the concentration

¹ Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly- and perfluoroalkyl substances (PFASs). *Environ Health Perspect* 123:A107–A111; <http://dx.doi.org/10.1289/ehp.1509934>.

² See Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate.

of PFOS and PFOA in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70 ppt. The HAs were based on peer-reviewed studies of the effects of PFOS and PFOA on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations exposed to PFOSs. These studies indicate that exposure to PFOS and PFOA over these levels may result in adverse health effects, including:

- a. Developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations);
- b. Cancer (testicular and kidney);
- c. Liver effects (tissue damage);
- d. Immune effects (e.g., antibody production and immunity);
- e. Thyroid disease and other effects (e.g., cholesterol changes).

107. Many states, however, have issued lower regulatory limits. For example, Vermont has set a combined level of 20 ppt for PFOA and PFOS and New Jersey has set a maximum contaminant level (MCL) of 14 ppt for PFOA.

108. Currently Florida follows the EPA level of 70 ppt for combined PFOA and PFOS levels.

109. In addition, PFOS and PFOA are hazardous materials because they pose a “present or potential threat to human health.” *Id*; see also, *National Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 3, 6 (D.C. Cir. 2015) (referring to PFOS as a “toxic compound” and a “hazardous chemical.”).

110. On May 2, 2012, the EPA published its Third Unregulated Contaminant Monitoring Rule (“UCMR3”), requiring public water systems nationwide to monitor for thirty contaminants of concern between 2013 and 2015.

111. PFOS and PFOA are such contaminants. *Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg. 26072 (May 2, 2012).

112. In 2016, the National Toxicology Program of the United States Department of Health and Human Services (“NTP”) and the International Agency for Research on Cancer (“IARC”) both released extensive analyses of the expanding body of research regarding the adverse effects of PFCs. The NTP concluded that both PFOA and PFOS are “presumed to be an immune hazard to humans” based on a “consistent pattern of findings” of adverse immune effects in human (epidemiology) studies and “high confidence” that PFOA and PFOS exposure was associated with suppression of immune responses in animal (toxicology) studies.³

113. The IARC concluded that there is “evidence” of “the carcinogenicity of . . . PFOA” in humans and in experimental animals, meaning that “[a] positive association has been observed between exposure to the agent and cancer for which a causal interpretation is . . . credible.”⁴

114. California has listed PFOA and PFOS to its Proposition 65 list as a chemical known to cause reproductive toxicity under the Safe Drinking Water and Toxic Enforcement Act of 1986.

115. The United States Senate and House of Representatives passed the National Defense Authorization Act in November, 2017, which included \$42 Million to remediate PFC contamination from military bases, as well as devoting \$7 Million toward the Investing in Testing

³ See U.S. Dep’t of Health and Human Services, Nat’l Toxicology Program, *NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate* (Sept. 2016), at 1, 17, 19, https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf

⁴ See Int’l Agency for Research on Cancer, IARC Monographs: *Some Chemicals Used as Solvents and in Polymer Manufacture* (Dec. 2016), at 27, 97, <http://monographs.iarc.fr/ENG/Monographs/vol110/mono110.pdf>.

Act, which authorizes the Center for Disease Control and Prevention (“CDC”) to conduct a study into the long-term health effects of PFOA and PFOS exposure.

116. In June, 2018, the Agency for Toxic Substances and Disease Registry (“ATSDR”) and EPA released a draft toxicological profile for PFOS and PFOA and recommended the drinking water advisory levels be lowered to **11 ppt for PFOA and 7 ppt for PFOS.**

C. Defendants’ Knowledge of the Threats to Public Health and the Environment Posed by PFOS and PFOA

117. Upon information and belief, by at least the 1970s 3M knew or should have known that PFOS and PFOA are mobile and persistent, bioaccumulative and biomagnifying, and toxic.

118. Upon information and belief, 3M concealed from the public and government agencies its knowledge of the risk of harm posed by PFCs.

119. In 1975, 3M concluded that PFOS was present in the blood of the general population. Since PFOA and PFOS are not naturally occurring, this finding should have alerted 3M to the possibility that their products were a source of this PFOS. The finding also should have alerted 3M to the possibility that PFOS might be mobile, persistent, bioaccumulative, and biomagnifying, as those characteristics could explain the absorption of PFOS in blood from 3M's products.

120. In 1976, 3M found PFOA in the blood of its workers. This finding should have alerted 3M to the same issues raised by the findings regarding PFOS in the prior year.

121. A 1978 study by 3M showed that PFOA reduced the survival rate of fathead minnow fish eggs.

122. Other studies by 3M in 1978 showed that PFOS and PFOA are toxic to rats, and that PFOS is toxic to monkeys. In one study in 1978, all monkeys died within the first few days of being given food contaminated with PFOS.

123. Studies by 3M after the 1970s also showed adverse effects from exposure to PFOA and PFOS.

124. In a 1983 study, for example, 3M found that PFOS caused the growth of cancerous tumors in rats.

125. A study proposal by 3M in 1983 stated that the resistance to degradation of PFOS and PFOA made them "potential candidates for environmental regulations, including further testing requirements under laws such as the Toxic Substances Control Act." 3M Environmental Laboratory (EE & PC), Fate of Fluorochemicals - Phase II, at p.6 (E. A. Reiner, ed. May 20, 1983).

126. A 1997 material safety data sheet ("MSDS") for a non-AFFF product made by 3M listed its only ingredients as water, PFOA, and other per-fluoroalkyl substances and warned that the product includes "a chemical which can cause cancer." The MSDS cited "1983 and 1993 studies conducted jointly by 3M and DuPont" as support for this statement. On information and belief, 3M's MSDSs for AFFF did not provide similar warnings.

127. Federal law requires chemical manufacturers and distributors to immediately notify the EPA if they have information that "reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment." Toxic Substances Control Act ("TSCA") § 8(e), 15 U.S.C. § 2607(e).

128. 3M did not comply with its duty under TSCA, and in April 2006 it agreed to pay EPA a penalty of more than \$1.5 million for its failure to disclose studies regarding PFOS or PFOA and other per-fluoroalkyl substances dating back decades, among other things.

129. On information and belief, all Defendants knew or should have known that in its intended and/or common use, AFFF containing PFOA or PFOS would very likely injure and/or threaten public health and the environment. On information and belief, this knowledge was

accessible to all defendants. For example, in 1970 a well-established firefighting trade association was alerted to the toxic effects on fish of a chemical compound related to PFOS. On information and belief, at least the following Defendants are and/or were members of this trade association: 3M, Tyco/Ansul, Chemguard, and National Foam/Angus.

130. Additionally, on information and belief, all Defendants knew or should have known that their AFFF products and the PFOA and PFOS the products contained, easily dissolve in water, because the products were designed to be mixed with water; are mobile, because the products were designed to quickly form a thin film; resist degradation, because that is the nature of the products' chemical composition, and on information and belief the products had long shelf-lives; and tend to bioaccumulate, because studies regarding the presence of substances with carbon-fluorine bonds in the blood of the general population were publicly available beginning in at least 1976.

131. The Defendants failed to warn and share information with all of its customers on the impacts of their products to the quality of unprotected water sources.

132. The Defendants' products created major waste management problems which they absolved themselves of, providing their customers with no practical guidance and instructions on how to deal with.

133. Some or all of the defendants understood how stable the fluorinated surfactants used in their AFFF formulations are when released into the environment from the first sale to their customers but neither warned customers nor provided reasonable instruction on how to manage wastes generated from use of their products. The persistence and contaminating nature of the perfluorinated surfactant 3M made that went into its AFFF products was well understood prior to the commercial applications of these surfactants at 3M's Cottage Grove facility in Minnesota.

134. The inventor of 3M's surfactants was J. H. Simons. Simons' 1948 patent (Simons⁵) reports: PFCs are "non-corrosive, and of little chemical reactivity"; "do not react with any of the metals at ordinary temperatures and react only with the more chemically reactive metals such as sodium, at elevated temperatures."

135. Simons reported that the surfactants that 3M specified for its AFFF do not react with other compounds or reagents due to the blanket of fluorine atoms surrounding the carbon skeleton of the molecule. These highly stable chemicals were developed to provide non-reactive solid and liquid chemicals with low surface tensions that could withstand high temperatures and would not react with highly reactive materials such as oxygen (see Simons⁶, Bryce⁷). 3M understood that the stability of the carbon-to-fluorine bonds and the lack of attraction for other chemical species prevent these surfactants from undergoing further chemical reactions or degrading under natural processes in the environment (see Simons 1950 published work⁸).

136. Bryce an employee of 3M, published an authoritative treatise stating "[t]his chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon" (Bryce (1964)).

137. The thermal stability of 3M's surfactants was understood prior to commercial production. In 1947, two researchers reported that fluorocarbon compounds did not degrade at temperatures as high as 500° C (932°F), even in the presence of catalytic materials (Grosse, et

⁵ Simons, J. H., U.S. Patent No. 2,447,717. August 24, 1948.

⁶ Simons, J. H., 1949. Fluorocarbons. Scientific American, Inc., 181(5): 44-47.

⁷ Bryce, H. G., 1964. Industrial and Utilitarian Aspects of Fluorine Chemistry. Fluorine Chemistry, 5(4): 295-498.

⁸ Simons, J. H., 1950. Fluorocarbons and Their Production. Fluorine Chemistry, 1(12): 401-422.

al.⁹). Simons' patent application further discloses that the chemicals he invented were thermally stable at temperatures up to 750° C (1382° F) (see Simons (1948); Simons et al., (1949)). These chemicals are non-reactive and thermally stable due to the strength and stability of the carbon-to-fluorine bonds (Simons (1949); Bryce (1950)¹⁰). Additional research by 3M expanded the understanding of the thermal stability of perfluorocarbon compounds. Bryce explained that the fracture of the carbon-to-carbon bonds may take place at very high temperatures from 600 to 1000° C (1112 to 1832° F) depending on the carbon chain length. He also reported that the carbon-to-fluorine bond is much stronger and can require temperatures of 1200° C (2192° F) to break (Bryce, 1964).

138. Nowhere in any Material Safety Data Sheet for any of the defendants' products is information on the thermal stability of their surfactants disclosed. Failure to disclose knowledge of how stable the chemical ingredients in the AFFF product to customers is a failure to warn just how indestructible the surfactant ingredients are when released to unprotected water sources and even treatment plants. The remarkable thermal stability of the surfactants used in defendants' formulations means that there is a risk that the customer has to deal with because the surfactant ingredients are incredibly stable. The surfactant additive is so stable that it is indestructible under normal use and environmental conditions; facts which are known by AFFF manufacturers and not apparent to the users of these products.

139. Defendant 3M was capable of producing a variety of perfluorinated products at its Cottage Grove facility (PFOS, PFOA, and PFBA, in addition to the salts of PFOS, PFOA, and

⁹ Grosse, A. V., et al., 1947. Properties of Fluorocarbons. *Industrial and Engineering Chemistry*, 39(3): 367-374. March.

¹⁰ Bryce, T. J., 1950. Fluorocarbons - Their Properties and Wartime Development. *Fluorine Chemistry*, 1(13): 423-462.

PFBA). All of these surfactants were understood by 3M to readily dissolve in water. In 1962, testing of PFOS-based surfactants indicated that these compounds were very soluble (Guenthner, et al.¹¹). Numerous PFCs manufactured by 3M, including fluorocarbon carboxylic acids and fluorocarbon sulfonic acids such as PFOA and PFOS readily dissolve when mixed with water (Bryce (1964)). 3M knew by 1964 that when dissolved, fluorocarbon carboxylic acids and fluorocarbon sulfonic acids dissociated to form highly stable perfluorocarboxylate and perfluorosulfonate ions (Bryce (1964)). Later studies by 3M on the adsorption and mobility of FC-95 and FC-143 (the ammonium salt of PFOA) in soils indicated very high solubility and very high mobility in soils for both compounds.¹²

140. Defendant 3M understood from the earliest days it acquired the Simons' patents that the surfactants it commercialized had extremely limited reactivity and that the high thermal stability of the perfluorinated carbon chain inhibited degradation in the environment (Bryce, 1950). The breaking of a carbon-to-fluorine bond requires the input of large amounts of energy to overcome the chemical bond between carbon and fluorine. Chemical and physical processes occurring in nature lack sufficient energy to break carbon-to-fluorine bonds and without this input of energy, the carbon-to-fluorine bonds remain intact.

141. Bryce wrote “This chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon” (Bryce, 1964). 3M had understanding of the chemical stability of the carbon-

¹¹ Guenther, R. A., et al., 1962. Surface Active Materials From Perfluorocarboxylic and Perfluorosulfonic Acids, 1(3): 165-168.

¹² 3M, 1978 [3MA10036129]

to-fluorine bond. It knew that its surfactants were immune to chemical and biological degradation in soils and groundwater.

142. A 1971 internal memo by H.G. Bryce states that “the thesis that there is ‘no natural sink’ for fluorocarbons obviously demands some attention.” Hence, 3M understood at the very least that when its AFFF product ingredient was released to the environment it basically will never degrade¹³.

143. In natural environments, the surfactants do not undergo degradation of the carbon-to-fluorine bonds of the perfluorinated carbon chain. The non-fluorinated, functional group of the chemical will partially degrade, yielding recalcitrant products such as PFOS, PFOA, and PFBA, which then resist further degradation. Basic weathering and degradation reactions, such as hydrolysis, occur at the non-fluorinated, functional group end of the molecule, producing the original fluorocarbon compound (Pearlson¹⁴). Depending on the surfactant these reduce to PFOS, PFOA, or PFBA.

144. Defendant 3M knew that the perfluorinated components in its AFFF product(s) when released to the environment would not degrade the perfluorinated carbon structure, but would remain intact and persist (Bryce, 1950). Nearly 30 years later and after the establishment of a robust market of AFFFs using such ingredients, defendant 3M finally got around to looking at the environmental risks its products pose. See a 1979 3M study¹⁵ which reports on its surfactant FC95 citing multiple studies on toxicity and biodegradability. The study reports that “F-95 was

¹³ 3M, 1971 [3MA02496587]

¹⁴ Pearlson, W. H., 1950. Fluorocarbon Derivatives. *Fluorine Chemistry*, 1(14): 463-522.

¹⁵ 3MA10066577

found to be completely resistant to biological test conditions... it appears that waterways are the environmental sink for FC95...”

145. A 1978 3M biodegradation study¹⁶ reports “... the results of the quite extensive study strongly suggests that FM3422 is likely to persist in the environment for extended period unaltered by metabolic attack.”

146. 3M and other defendants chose not to disclose their knowledge of the inability of their surfactants to break down in the natural environment. They failed to warn that their products can contaminate drinking water sources for many decades despite their knowledge that this was a likely outcome from the use of their products.

147. All of the Defendants are sophisticated and knowledgeable in the art and science of formulating AFFF products. They understood far more about the properties of and the biodegradability of their additives than any other customer. They chose not to use their knowledge to design safer products. See Ansul¹⁷ which wrote the following about the biodegradation of AFFF: Biodegradation is a “measure of how completely a substance breaks down in the environment. The biodegradability of a chemical is expressed as a percentage determined by dividing the BOD by the COD and multiplying by 100. The chemical oxygen demand, COD, is the amount of oxygen needed to completely break a chemical down to its most oxidized state (for example: CO₂, H₂O, and HF) and is a measured analytical value. The biochemical oxygen demand, BOD, is an empirical test that measures a relative oxygen requirement. This test measures the oxygen required for the biochemical degradation of organic and inorganic material... For firefighting foams, this test is conducted for 20 days as opposed to the usual five days for other chemicals because the

¹⁶ 3MA00717615

¹⁷ Ansul Inc., Environmental Aspects of AFFF and AR-AFFF, White Paper 1017, 2003

bacteria require a longer time to acclimate to the test solution of the foam... B[b]iodegradation is the percentage ratio of BOD/COD. If that resulting number is higher than 50%, the chemical is determined to be readily biodegradable. If it is below 15%, the chemical is determined to be not biodegradable. Ansul summarized its explanation by noting: If BOD/COD > 50%, then biodegradable; If BOD/COD < 15%, then NOT biodegradable.

148. The information that Ansul published and widely distributes to its customers is both misleading and deceitful. Ansul's explanation ignores the fact that while the foam stabilizer additives biodegrade, perfluorinated surfactants do not. Dimitrov, et al.¹⁸ report that PFAS when present in the environment does not undergo any further chemical, microbial or photolytic degradation or breakdown. Long before Dimitrov, 3M understood this as shown by its explanation of biodegradability in a 1976 study, noting that hydrocarbon components of a perfluorinated admixture will degrade leaving behind the perfluorinated components which do not biodegrade.¹⁹ Once these substances undergo biotic or abiotic degradation, the perfluorinated moiety that remains will be PFOS. The rate of degradation to PFOS is not considered significant and over time these substances are all expected to degrade in the environment to environmentally persistent PFOS. These were facts that were known by 3M in the 1960s. These were facts that other AFFF manufacturers knew or should have known; and if they didn't then they simply created their products blindly and without concern as to whether they could cause harm to unprotected water resources and place communities at risk.

149. Defendant 3M along with Ansul and likely others had intimate understanding of the poor biodegradation of their fluorochemical compounds. A 1976 study, for example, observed

¹⁸ *Ibid*, Dimitrov, S., et al. 2004.

¹⁹ 3MA01252037

no biodegradation of FC-95, the potassium salt of PFOS. 3M characterized the result of the study “unsurprising” in light of the fact that “[b]iodegradation of FC 95 is improbable because it is completely fluorinated”.²⁰

150. The Ansul Company (Tyco), published a report in 1977 titled Environmentally Improved AFFF.²¹ This report acknowledges that AFFFs were understood to be environmentally damaging and could pose potential negative impacts to groundwater quality. Ansul wrote: “The purpose of this work is to explore the development of experimental AFFF formulations that would exhibit reduced impact on the environment while retaining certain fire suppression characteristic...improvements [to AFFF formulations] are desired in the environmental area, i.e., development of compositions that have a reduced impact on the environment without loss of fire suppression effectiveness.” Its study showed it had the ability to reformulate its AFFF products to be biodegradable, but there is no evidence that any company bothered to do so.

151. Also, in 1979 Defendant 3M carried out a comprehensive biodegradation and toxicity study covering investigations between 1975 and 1978.²² More than 10 years after 3M began selling its AFFF products it wrote “there has been a general lack of knowledge relative to the environmental impact of these chemicals.” This report ominously discloses “If these materials are not biodegradable, what is their fate in the environment?”

²⁰ 3M, 1976 [3MA01252037]

²¹ Ansul Co., Final Report: Environmentally Improved AFFF, N00173-76-C-0295, Marinette, WI, Dec. 13, 1977

²² 3MA00326828

152. As discussed above, neither 3M nor, on information and belief, the other defendants, complied with their obligations to notify EPA about the "substantial risk of injury to health or the environment" posed by their AFFF products containing PFOS/A. See TSCA § 8(e).

D. AFFF Usage and Resulting PFOS and PFOA Contamination at the Florida State Fire College

153. As alleged herein, for decades firefighter personnel used PFOS- and PFOA-containing AFFF products that were manufactured, designed, sold, supplied and/or distributed by each of the above-named Defendants for training operations at the Fire College, including firefighting and explosion training. Over this course of time, well over one hundred (100) combined firefighter instructors and trainees used the Defendants' AFFF products while training and/or working at the Fire College.

154. The Fire College is a state owned and operated facility. It is part of the Florida Department of Financial Services, Division of the State Fire Marshall.

155. The Defendants' AFFF products was expected to and did reach the Fire College without substantial change in the condition on which the Defendants sold it.

156. At all times material, the Defendants were responsible for the design, manufacture and distribution of thousands of gallons of AFFF products used and stored at the Fire College.

157. Due to these training operations, AFFF was released into the surrounding air, soil, and groundwater at locations including, but not limited to, the current fire training area located at the Fire College campus, and further contaminating the water supplies at the Fire College.

158. On or about August 2018, the Florida DEP obtained samples from the three wells that provide the water supplies to the Fire College, including, the water running through the pipes, faucets, showerheads, appliances, sinks, and drinking water fountains located throughout the Fire College campus. The Florida DEP determined that the PFOS and PFOA levels in the drinking

water in two of the three wells measured 250 ug/L and 270 ug/L, respectively. This is equivalent to 250,000 – 270,000 parts per trillion (ppt), which vastly exceeds the EPA’s current health-safety level at 70 ppt and even further exceeds the ATSDR recommended levels be lowered to 11 ppt for PFOA and 7 ppt for PFOS.

159. As a direct and proximate result of the failure to warn the personnel at the Fire College, including those most sensitive to contamination, AFFF and its constituents were permitted to enter the air, soil, and groundwater, ultimately entering the Plaintiffs’ and the putative Class members’ bodies.

160. Upon information and belief, instructions, warning labels, and material safety data sheets that Defendants provided with the AFFF did not reasonably nor adequately describe the health and environmental hazards of AFFF that Defendants knew or should have known.

E. The Plaintiffs and Putative Class Members’ Exposures to PFOS and PFOA and Damages

161. The Plaintiffs and putative Class members have been injured as a result of their unknowing consumption, inhalation and/or dermal absorption of PFOS and/or PFOA from Defendants’ AFFF products at concentrations hazardous to their health.

162. The Plaintiffs and putative Class members have suffered from bioaccumulation of PFOS and/or PFOA in their bodies as a result of their frequent contact, proximity to, use, and/or handling of AFFF in the course of their employment and/or training at the Fire College. The Plaintiffs and each of the putative class members have been contaminated with PFOS and/or PFOA due to their exposure to the PFCs in their concentrated forms through their use of AFFF. Additionally, or alternatively, the Plaintiffs and putative Class members have suffered from bioaccumulation of PFOS and/or PFOA in their bodies as a result of the PFOS and PFOA

contamination of the water supplies by AFFF releases that contaminated the Fire College's water supply.

163. The Plaintiffs and putative Class members who trained or worked at the Fire College, have been unknowingly exposed to significantly elevated PFCs including at concentrations hazardous to their health.

164. Plaintiffs seek recovery from Defendants for injuries, damages and losses suffered by the Plaintiffs as a direct and proximate result of their exposure to PFOS, PFOA, and other toxic substances arising from their frequent exposure to the Defendants' AFFF products, in an amount to be determined at trial, exclusive of interest, costs, and attorney's fees.

165. Given that the long-term health effects of PFOS and/or PFOA have not been exhaustively studied, and given that, based on studies that have been done, there is compelling evidence that both malignant and nonmalignant effects result from PFOS and/or PFOA exposure, and because the full extent of latency of such effects has not yet been determined, periodic diagnostic medical exams for populations with PFOS and/or PFOA exposure from contaminated water are reasonably necessary.

166. Sustained exposure to PFOS and/or PFOA substantially increases the risk to the Plaintiffs and the putative Class members of contracting the serious latent diseases alleged herein.

167. As a result of the sustained exposure and substantial increased risk of contracting the serious latent diseases alleged herein, periodic medical examinations by qualified licensed medical professionals are both reasonable and necessary to permit early detection of latent diseases in the Plaintiffs and the putative Class members.

F. AFFF Containing PFOS and PFOA is Fungible and Commingled in the Groundwater

168. AFFF containing PFOS and/or PFOA, once it has been released to the environment, lacks characteristics that would enable identification of the company that manufactured that particular batch of AFFF.

169. A subsurface plume, even if it comes from a single location, such as a retention pond or fire training area, originates from mixed batches of AFFF coming from different manufacturers.

170. For example, the case here in the Fire College is typical: even though several areas were located at the Fire College where AFFF was used and entered the groundwater, investigators could not determine the identity of all of the manufacturers whose AFFF containing PFOS and PFOA contributed to the resulting groundwater contamination plume. In the case at bar, however, is atypical to the extent that there still remained stockpiles of National Foam's AER-O-Foam XL-3 3%, on the Fire College site when the Florida DEP obtained its samples.

171. Because precise identification of the specific manufacture of any given AFFF that was the source of PFOS and PFOA found in a Class members' blood, a water well, or the groundwater, is nearly impossible, given certain exceptions, Plaintiffs must pursue all Defendants, jointly and severally, for those indivisible injuries which Defendants have collectively visited upon Plaintiffs and the putative Class.

172. Defendants are also jointly and severally liable because they conspired to conceal the true toxic nature of PFOS and PFOA, to profit from the use of AFFF containing PFOS and PFOA, at Plaintiffs' and the putative Class members' expense, to contaminate the Fire College's water supply, and to attempt to avoid liability for such contamination of the groundwater and poisoning of the Plaintiffs and the Class.

G. Market Share Liability, Alternative Liability, Concert of Action, Enterprise Liability

173. Defendants in this action are manufacturers that control a substantial share of the market for AFFF-containing PFOS and/or PFOA in the United States and are jointly responsible for the contamination of the water supply at the Fire College and for causing the damages and injuries complained of in this Complaint. Market share liability attaches to all Defendants and the liability of each should be assigned according to its percentage of the market for AFFF-containing PFOS and/or PFOA at issue in this Complaint. PFOS and PFOA are fungible; it is nearly impossible to identify the exact Defendant who manufactured any given batch of AFFF containing PFOS and/or PFOA found free in the air, soil or groundwater, and each of these Defendants participated in a state-wide and national market for AFFF containing PFOS and/or PFOA during the relevant time.

174. Concert of action liability attaches to all Defendants, each of which participated in a common plan to commit the torts alleged herein and each of which acted tortuously in pursuance of the common plan to knowingly manufacture and sell inherently dangerous AFFF-containing PFOS and/or PFOA.

175. Enterprise liability attaches to all of the named Defendants for casting defective products into the stream of commerce.

V. CLASS ALLEGATIONS

176. The Plaintiffs, for themselves and on behalf of a Class of similarly-situated individuals, bring this action seeking to recover damages for injuries to their person and for medical monitoring resulting from their use of PFOS- and PFOA- containing AFFF products and/or from exposure to groundwater, surface water, and affected areas contaminated with PFOS and/or PFOA at the Florida State Fire College from AFFF products that were manufactured, designed, sold, supplied and/or distributed by each of the above-named Defendants.

177. Plaintiffs propose two (2) classes and sub-classes, and seek to certify and maintain it as a class action under Rules 23(a); (b)(1) and/or (b)(2); and (b)(3) of the Federal Rules of Civil Procedure, subject to amendment and additional discovery. The proposed classes sub-classes, and the Plaintiffs who seek to represent those classes, are as follows:

a. **PFOS and/or PFOA Invasion Injury Class:** This Class is composed of the following sub-classes:

- (1) Firefighter Sub-class: All individuals who were firefighter instructors, trainees and other firefighter personnel that sustained bioaccumulation of PFOS and/or PFOA in their bodies and:
 - (i) who have suffered personal injury as a result of their frequent contact, proximity to, use, and/or handling of AFFF; and/or
 - (ii) who have suffered personal injury as a result of their exposure to the PFOS- and/or PFOA- contaminated water at the Fire College.

The proposed class representative is Plaintiff David Battisti.

- (2) Non-Firefighter Sub-class: All non-firefighter individuals, including staff members and other individuals, that sustained bioaccumulation of PFOS and/or PFOA in their bodies and who have suffered personal injury as a result of their exposure to the PFOS- and/or PFOA- contaminated water at the Fire College.

The proposed class representatives are Plaintiffs, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle.

b. **Medical Monitoring Class:** All individuals who sustained bioaccumulation of PFOS and/or PFOA in their bodies and were exposed to PFOS- and/or PFOA- contaminated water at the Fire College.²³

²³ Under Florida law, plaintiffs are entitled to bring a claim for medical monitoring despite absence of physical injury and the court may create, supervise, and implement a medical monitoring plan under certain guidelines and circumstances. *See Petito v. A.H. Robbins Company, Inc.*, 750 So. 2d 103 (Fla. 3d DCA 1999).

The proposed class representatives are Plaintiffs, David Battisti, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle.

178. Plaintiffs are members of the proposed Sub-Classes they seek to represent. This action satisfies the numerosity, commonality, typicality, adequacy, predominance, and superiority requirements of those provisions.

179. Excluded from the Classes are:

- a. Defendants, their officers, directors, management, legal representatives, employees, assigns, heirs, successors, and wholly owned or partly owned subsidiaries and affiliates;
- b. Any judges or justices involved in this action and any members of their immediate families;
- c. Any Class counsel or their immediate family members; and
- d. All governmental entities.

180. Plaintiffs reserve the right to amend the Class and Sub-Class definition if discovery and further investigation reveal that any Class should be expanded, divided into additional sub-classes, or modified in any other way.

Numerosity and Ascertainability

181. This action meets the numerosity requirement of Fed. R. Civ. P. 23(a)(1) because the number of impacted individuals, upon information and belief, has reached the hundreds making individual joinder of class members' respective claims impracticable. While the exact number of Class members is not yet known, a precise number can be ascertained from the Florida Department of Financial Services, Division of State Fire Marshall, Florida State Fire College records, and through other appropriate discovery.

182. The resolution of the claims of the Class members in a single action will provide substantial benefits to all parties and the Court. It is expected that the Class members will number in the hundreds.

183. Finally, Class members can be notified of the pendency of this action by Court-approved notice methods.

Typicality

184. Pursuant to Fed. R. Civ. P. 23(a)(3), Plaintiffs' claims are typical of the claims of Class members, and arise from the same course of conduct by Defendants. Plaintiffs' persons, like all Class members, have been damaged by Defendants' misconduct in that they have incurred damages and losses related to their use and/or consumption, inhalation, or dermal absorption of PFOS and/or PFOA from the Defendants' AFFF products and/or exposure to the PFOS- and PFOA-contaminated water at the Fire College.

185. Furthermore, the factual bases of Defendants' actions and misconduct are common to all Class members and represent a common thread of misconduct resulting in common injury to all Class members. The relief Plaintiffs seek is typical of the relief sought for absent Class members.

Adequacy of Representation

186. Plaintiffs will serve as fair and adequate class representatives as their interests, as well as the interests of their counsel, do not conflict with the interest of other members of the Class they seek to represent.

187. Further, Plaintiffs have retained counsel competent and well experienced in class action litigation, mass tort litigation, and environmental tort litigation.

188. Plaintiffs and their counsel are committed to vigorously prosecuting this action on behalf of the Class and have the financial resources to do so. Neither the Plaintiffs nor their counsel have interests adverse to the Class.

Predominance of Common Issues

189. There are numerous questions of law and fact common to Plaintiffs and Class members that predominate over any question affecting only individual Class members, making it appropriate to bring this action under Rule 23(b)(3). The answers to these common questions will advance resolution of the litigation as to all Class members. These common legal and factual issues include the following:

- a. Whether Defendants engaged in the conduct alleged herein;
- b. Whether Defendants knew or should have known that exposure to PFOS and PFOA could increase health risks;
- c. Whether Defendants knew or should have known that their manufacture of AFFF containing PFOS and PFOA was unreasonably dangerous;
- d. Whether Defendants knew or should have known that their AFFF contained persistent, stable and mobile chemicals that were likely to contaminate groundwater water supplies;
- e. Whether Defendants failed to sufficiently warn users of the potential for harm that resulted from use of their products;
- f. Whether Defendants became aware of health and environmental harm caused by PFOS and PFOA in their AFFF products and failed to warn users and Plaintiffs and the Class of same;
- g. The extent to which Defendants knew about the PFOS and PFOA contamination in the water at the Fire College;
- h. Whether the Defendants owed a duty to the Plaintiffs and the Class to refrain from the actions that caused the contamination of the water with PFOS and PFOA;

- i. Whether Defendants made unlawful and misleading representations or material omissions with respect to the health impacts of PFOS and PFOA;
- j. For the Medical Monitoring Classes, whether the risk of any health issue or bodily injury of Plaintiffs and the Class are attributable to exposure of PFOS and PFOA in the Defendants' AFFF products and/or to exposure to the PFOS- and PFOA- contaminated water at the Fire College; and
- k. Whether Plaintiffs and Class members are entitled to damages and other monetary relief and other equitable relief, including but not limited to punitive damages, and if so, in what amount.

Superiority

190. The class action mechanism is superior to any other available means of the fair and efficient adjudication of this case. Further, no unusual difficulties are likely to be encountered in the management of this class action. Given that a great number of individuals have been impacted by the Defendants' conduct, it is impracticable for Plaintiffs and the Class to individually litigate their respective claims individually due to the risk of producing inconsistent or contradictory judgments, generating increased delays and expense, and wasting judicial resources. No unusual difficulties are likely to be encountered in the management of this class action. Therefore, the class action mechanism minimizes prospective management challenges and provides the efficiency of a single adjudication under the comprehensive oversight of a single court

VI. CAUSES OF ACTION

COUNT I – NEGLIGENCE AND GROSS NEGLIGENCE

191. Plaintiffs adopt, reallege and incorporate the allegations in paragraphs 1 through 190 above, and further allege the following:

192. At all times material, the Defendants manufactured, designed, formulated, marketed, tested, promoted, supplied, sold, and/or distributed their respective PFOS- and PFOA-

containing AFFF products in the regular course of business. Defendants knew or should have known that exposure to PFOS and PFOA was hazardous to the environment and to human health.

193. Defendants also knew or should have known that the manner in which they were manufacturing, marketing, and selling AFFF, containing PFC's, was hazardous to human health, bioaccumulated in the blood, and caused serious health effects, including cancer.

194. Defendants knew or should have known that firefighters working with and using their AFFF products would be exposed to PFOS and PFOA released from the AFFF.

195. At all times material, Plaintiff David Battisti and putative members of the Firefighter sub-class consumed, inhaled and/or suffered dermal absorption of these hazardous PFOS and PFOA contaminants released from the Defendants' AFFF products. Plaintiff David Battisti's and putative members of the Firefighter sub-class's exposure to each Defendant's products, which were connected to and incidental to Defendants' manufacture, design, sale, supply and/or distribution of its products, was harmful and substantially contributed in causing the Plaintiff's, and each of the putative members', injuries to their person.

196. Defendants also knew or should have known that PFC's are highly soluble in water, highly mobile, extremely persistent in the environment, and high likely to contaminate water supplies if released into the environment.

197. Defendants knew or should have known that the manner in which they were manufacturing, marketing, and selling AFFF containing PFC's would result in the contamination of the well drinking supplies at fire training academies, like the Florida State Fire College.

198. At all times material, Plaintiffs, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle, and putative members of the Non-Firefighter Sub-class,

sustained bioaccumulation of PFOS and/or PFOA in their bodies and have suffered personal injury as a result of their exposure to the PFOS- and/or PFOA- contaminated water at the Fire College.

199. Plaintiffs, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle, and putative members of the Non-Firefighter Sub-class's exposure to PFOS- and PFOS- contaminated water at the Fire College released from the Defendants' AFFF products, were connected to and incidental to Defendants' manufacture, design, sale, supply and/or distribution of its products, was harmful and substantially contributed in causing the Plaintiffs', and each of the putative members', injuries to their person.

200. Defendants owed a duty to Plaintiffs to act reasonably and not place inherently dangerous AFFF into the marketplace when its release into the drinking water supplies was imminent and certain.

201. Defendants marketed and sold their products with knowledge that AFFF containing large quantities of toxic PFC's would be used in training exercises and in emergency situations at the fire training academies, like the Fire College, in such a manner that dangerous chemicals would be released into the environment.

202. Further, Defendants marketed and sold their products with knowledge that AFFF containing large quantities of toxic PFC's would be stored in fire suppressant systems and tanks and that such systems and storage were used and maintained in such a manner that dangerous chemicals would be released into the environment.

203. Knowing of the dangerous and hazardous properties of AFFF, and the manner in which AFFF would be used, stored, and maintained at fire training academies, like the Fire College, it was foreseeable that AFFF would contaminate the surrounding environment, groundwater, and drinking water supplies of the Fire College.

204. Defendants therefore knew or should have known that safety precautions would be required to prevent the release of PFOS and PFOA into the surrounding environment, groundwater, and drinking water supplies.

205. The magnitude of the burden on the Defendants to guard against this foreseeable harm to Plaintiffs and the Class was minimal, as the practical consequences of placing this burden on the Defendants amounted to a burden to provide adequate instructions, proper labeling, and sufficient warnings about their AFFF products.

206. As manufacturers, Defendants were in the best position to provide adequate instructions, proper labeling, and sufficient warnings about their AFFF products.

207. Considering the above factors related to risk, foreseeability, social utility, burden of guarding against the harm, and the practical consequences of placing that burden on the Defendants, the Defendants therefore owed a cognizable duty to Plaintiffs and the Class not to contaminate their water supplies and the surrounding environment and groundwater with AFFF, containing dangerous levels of PFC's.

208. Defendants had a duty to warn of the hazards associated with AFFF, containing PFC's, entering and poisoning the environment and groundwater.

209. Defendants, as manufacturers, marketers, and sellers of AFFF owed Plaintiffs and the Class a cognizable duty to exercise reasonable care to ensure that AFFF was manufactured, marketed, and sold in such a way as to ensure that the end users of AFFF were aware of the potential harm PFOS and PFOA can cause to human health and the environment.

210. Upon learning of the release of the contaminants, all Defendants owed Plaintiffs and the Class a duty to warn and notify Plaintiffs and the Class of the release of the contamination

before it injured Plaintiffs and the Class and their property and/or to act reasonably to minimize the damage to Plaintiffs and their property.

211. Defendants breached their duty by allowing PFOS and PFOA to be released into the water supplies at the Fire College, and through their failure to warn and notify the end users of AFFF of the danger that PFOS and PFOA would enter into the environment and groundwater.

212. Each Defendant who was in the business of manufacturing, designing selling, supplying and/or distributing AFFF products during the times pertinent to this suit was negligent and/or failed to exercise reasonable care in one, some and/or all of the following respects, the same being the proximate cause of Plaintiffs' and the Class' injuries²⁴:

- a. In failing to adequately warn Plaintiffs and the Classes of the dangerous characteristics of their products in that each Defendant failed to warn Plaintiffs and the Class members that they he could develop serious adverse health effects including, but not limited to, kidney and testicular cancer and related diseases, liver damage, thyroid disease, ulcerative colitis, immune effects and deficiencies, and/or developmental effects to fetuses during pregnancy or to breastfed infants, as a result of being exposed to PFOS and/or PFOA emitted from each Defendant's products;
- b. In failing to place adequate warnings on or in the containers of said AFFF products containing PFCs to warn of the dangers to one's health of coming in contact with said PFCs, including PFOS and PFOA, and of the gravity of the risk and extent of danger that Plaintiffs were exposing themselves by working with and being exposed to said products;
- c. In failing to take reasonable precautions or exercise reasonable care to publish, adopt and enforce a safety plan and a safe method of handling and disposing of AFFF products;
- d. In failing to develop and utilize a substitute material to eliminate PFCs, including PFOS and PFOA, in the AFFF products manufactured, designed, sold, supplied and/or distributed;

²⁴ The following subsections (a-g) contain allegations of fact (not allegations of law) supporting Plaintiffs' claim for negligence. Thus, Plaintiffs are not alleging that Defendants are subject to any legal requirement or legal duty not recognized under Florida law.

- e. In failing to utilize the available substitute materials for PFCs, including PFOS and PFOA, in the AFFF products manufactured, designed, sold, supplied and/or distributed by the Defendants;
- f. In continuing to sell and otherwise distribute AFFF products when each Defendant knew at the time of sale and/or distribution of said products, that such products caused injuries including, but not limited to, kidney and testicular cancer and related diseases, liver damage, thyroid disease, ulcerative colitis, immune effects and deficiencies, and/or developmental effects to fetuses during pregnancy or to breastfed infants, as a result of being exposed to PFOS and/or PFOA emitted from each Defendant's products; and
- g. In failing to adequately test their respective AFFF products before offering them for sale and use so that Plaintiffs and other persons similarly situated, would not consume, inhale, or sustain dermal absorption of PFOS and/or PFOA released from the ordinary and foreseeable use of said products and thereby exposing the Plaintiffs and Class members to the development of fatal injuries including, but not limited to, kidney and testicular cancer and related diseases, liver damage, thyroid disease, ulcerative colitis, immune effects and deficiencies, and/or developmental effects to fetuses during pregnancy or to breastfed infants, as a result of being exposed to PFOS and/or PFOA emitted from each Defendant's products.

213. As such, the Defendants, negligently, grossly negligently, recklessly, willfully, wantonly, and/or intentionally breached their legal duties to the Plaintiffs and the Class, causing the contamination of the water supplies in and around the Fire College.

214. Defendants further breached the duties owed to the Plaintiffs and the Class by failing to take reasonable, adequate, and sufficient steps or actions to eliminate, correct, or remedy any contamination after it occurred.

215. Defendants' breaches of their duties were direct and proximate causes of Plaintiffs' and the Class' injuries, damages, and the imminent, substantial, and impending harm to their health.

216. Defendants' breaches of their duties caused the water in wells at the Fire College to become contaminated with unsafe and dangerous levels of PFOS and PFOA.

217. Plaintiffs and the Class suffered foreseeable injuries and damages as a proximate result of said Defendants' negligent breach of their duties as set forth above. At the time Defendants breached their duties to Plaintiffs and the Class, Defendants' acts and/or failures to act posed recognizable and foreseeable possibilities of danger to Plaintiffs and the Class so apparent as to entitle them to be protected against such actions or inactions.

218. As a direct and proximate result of the negligent acts and/or omissions described in this Count, proposed class representatives, Plaintiffs David Battisti, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle, were caused to suffer serious bodily injury and resulting pain and suffering, disability, disfigurement, mental anguish, embarrassment, inconvenience, loss of capacity for the enjoyment of life, the expense of medical care and treatment, loss of earnings, loss of the ability to earn money and aggravation of a pre-existing condition. The losses are either permanent or continuing in nature and the Plaintiffs David Battisti, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle, will suffer the losses in the future.

219. Accordingly, Plaintiffs and the Classes seek damages from Defendants, in an amount to be determined at trial, directly resulting from their injuries to their persons, in a sufficient amount to compensate them for the injuries and losses sustained, injuries to persons, and actual, consequential, and nominal damages, flowing from the negligence which are the natural and proximate result of Defendants conduct in an amount to be proved at trial.

WHEREFORE, Plaintiffs, for themselves and on behalf of all others similarly situated, pray for judgment against the Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co.); TYCO FIRE PRODUCTS L.P., as successor-in-interest to THE ANSUL COMPANY; BUCKEYE FIRE EQUIPMENT CO.; CHEMGUARD, INC.; NATIONAL FOAM,

INC.; KIDDE FIRE FIGHTING, INC. (f/k/a CHUBB NATIONAL FOAM, INC. f/k/a NATIONAL FOAM, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE PLC, INC. (f/k/a WILLIAMS US INC. f/k/a WILLIAMS HOLDINGS, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE-FENWAL, INC. (f/k/a FENWAL INC.), individually and as successor-in-interest to NATIONAL FOAM, INC.; and UTC FIRE & SECURITY AMERICAS CORPORATION, INC. (f/k/a GE INTERLOGIX, INC.), individually and as successor-in-interest to NATIONAL FOAM, INC., for damages in excess of Five Million Dollars (\$5,000,000), for interest, and for such other and further relief both at law and in equity to which Plaintiffs and Class Members may show to be justly entitled, and demand a trial by jury of all issues triable as a matter of right by a jury.

COUNT II – STRICT LIABILITY

220. Plaintiffs adopt, reallege and incorporate the allegations in paragraphs 1 through 190 above, and further allege the following:

221. Each Defendant, their predecessors-in-interest and/or their alter egos are and/or have been a manufacturer, distributor, supplier, retailer, wholesaler and/or assembler of AFFF products containing PFOS and/or PFOA.

222. The products complained of were manufactured, designed, sold, supplied and/or distributed by each of the Defendants and used by and/or in the vicinity of the Plaintiffs and Class members during their lifetime and/or they were exposed to PFOS- and PFOA- contaminated water at the Fire College.

223. Defendants knew or should have reasonably known that exposure to PFOS and PFOA was hazardous to the environment and to human health.

224. Defendants knew or should have reasonably known that the manner in which they were manufacturing, marketing, and selling AFFF, containing concentrated PFC's, was hazardous to human health and the environment.

225. Defendants knew or should have reasonably known that the manner in which they were manufacturing, marketing, and selling AFFF containing PFC's would result in the contamination of those who handled, used, came into contact with, transported, etc., the product, as well as the contamination at fire training academies, like the Fire College.

226. Knowing of the dangerous and hazardous properties of the AFFF, Defendants could have manufactured, marketed, and sold alternative designs or formulations of AFFF that did not contain PFOS and/or PFOA.

227. These alternative designs and/or formulations were already available, practical, similar in cost, and technologically feasible.

228. The use of these alternative designs would have reduced or prevented the reasonably foreseeable harm to the Plaintiffs that was caused by the Defendants' manufacture, marketing, and sale of AFFF that contained PFOS and/or PFOA.

229. Additionally, the AFFF that was manufactured, marketed, and sold by the Defendants contained PFOS and PFOA that were so toxic and unreasonably dangerous to human health and the environment, with the toxic chemicals being so mobile and persistent, that the act of designing, formulating, manufacturing, marketing, and selling this product was unreasonably dangerous under the circumstances.

230. Further, this contamination then led to the exposure of the Firefighter instructors, trainees and other firefighter personnel who used the AFFF to the toxins and increased their risk of contracting numerous diseases as more fully set forth above.

231. The AFFF manufactured, marketed, and sold by the Defendants was dangerous and defective because the foreseeable risk of harm could have been reduced or eliminated by the adoption of a reasonable, alternative design that was not unreasonably dangerous.

232. Defendants' products were in a defective condition and unreasonably dangerous, in that those products²⁵:

- a. Did not provide an adequate warning of the potential harm that might result from exposure to PFOS and/or PFOA emitted from the AFFF products and, alternatively, did not have adequate instructions for safe use of the products;
- b. Did not have warnings to persons, such as Plaintiffs and the Class members who had been, or reasonably may have been, exposed to Defendants' AFFF products, of their disease potential, the proper steps to take to reduce the harmful effects of previous exposure, the need to have periodic medical examinations including the giving of histories which revealed the details of the previous exposure, and the need to have immediate and vigorous medical treatment for all related adverse health effects, including, but not limited to, kidney and testicular cancer and related diseases, liver damage, thyroid disease, ulcerative colitis, immune effects and deficiencies, and/or developmental effects to fetuses during pregnancy or to breastfed infants, as a result of being exposed to PFOS and/or PFOA emitted from each Defendant's products;
- c. By design contained PFCs, including PFOS and/or PFOA, toxic chemicals that are deleterious, poisonous, and highly harmful to Plaintiffs and the Class members; or
- d. Contained PFCs, including PFOS and/or PFOA, when and after it became feasible to design, manufacture and market reasonably comparable products not containing PFCs, including PFOS and/or PFOA.

233. Plaintiffs and the Class members, unaware of the defective and unreasonably dangerous condition of Defendants' products at a time when such products were being used for the

²⁵ The following subsections (a-d) contain allegations of fact (not allegations of law) supporting Plaintiffs' claim for strict liability. Thus, Plaintiffs are not alleging that Defendants are subject to any legal requirement or legal duty not recognized under Florida law.

purposes for which they were intended, were exposed to PFCs, including PFOS and/or PFOA, released from the Defendants' AFFF products.

234. Each Defendant knew that their products would be used without inspection for defects, and by placing them on the market, represented that they would safely do the job for which they were intended, which must necessarily include the safe handling, installation and replacement of said AFFF products.

235. Defendants' defective design and formulation of AFFF was a direct and proximate cause of the environmental and health impacts from PFOS, PFOA, and potentially other toxic substances, that came from the use and storage of AFFF at the Fire College.

236. As a result of Defendants' defective design and formulation of AFFF, the resulting contamination, the Plaintiffs have been injured in that their exposure to PFOS, PFOA, and potentially other toxic substances has increased their risk of developing illnesses associated with this exposure as more fully described and/or significantly increased their fear of developing those illnesses.

237. As a result of Defendants' design and formulation of a defective product, Defendants are strictly liable in damages to the Plaintiffs.

238. As a direct and proximate result of the acts and/or omissions described in this Count, proposed class representatives, Plaintiffs David Battisti, Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle, were caused to suffer serious bodily injury and resulting pain and suffering, disability, disfigurement, mental anguish, embarrassment, inconvenience, loss of capacity for the enjoyment of life, the expense of medical care and treatment, loss of earnings, loss of the ability to earn money and aggravation of a pre-existing condition. The losses are either permanent or continuing in nature and the Plaintiffs David Battisti,

Regina Saueracker, Mary Ann Benson, Susan Schell, Carol Smith, and Anita Pringle, will suffer the losses in the future.

239. Defendants' acts were willful, wanton, reckless and/or conducted with a reckless indifference to the rights of Plaintiffs and the Class members.

240. Accordingly, Plaintiffs and the Classes seek damages from Defendants, in an amount to be determined at trial, directly resulting from their injuries to their persons, in a sufficient amount to compensate them for the injuries and losses sustained, injuries to persons, and actual, consequential, and nominal damages, flowing from the Defendants' strict liability which are the natural and proximate result of Defendants conduct in an amount to be proved at trial.

WHEREFORE, Plaintiffs, for themselves and on behalf of all others similarly situated, pray for judgment against the Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co.); TYCO FIRE PRODUCTS L.P., as successor-in-interest to THE ANSUL COMPANY; BUCKEYE FIRE EQUIPMENT CO.; CHEMGUARD, INC.; NATIONAL FOAM, INC.; KIDDE FIRE FIGHTING, INC. (f/k/a CHUBB NATIONAL FOAM, INC. f/k/a NATIONAL FOAM, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE PLC, INC. (f/k/a WILLIAMS US INC. f/k/a WILLIAMS HOLDINGS, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE-FENWAL, INC. (f/k/a FENWAL INC.), individually and as successor-in-interest to NATIONAL FOAM, INC.; and UTC FIRE & SECURITY AMERICAS CORPORATION, INC. (f/k/a GE INTERLOGIX, INC.), individually and as successor-in-interest to NATIONAL FOAM, INC., for damages in excess of Five Million Dollars (\$5,000,000), for interest, and for such other and further relief both at law and in equity to which Plaintiffs and Class Members may show to be justly entitled, and demand a trial by jury of all issues triable as a matter of right by a jury.

COUNT III – MEDICAL MONITORING

241. Plaintiffs adopt, reallege and incorporate the allegations in paragraphs 1 through 190 above, and further allege the following:

242. Medical monitoring is available to Plaintiffs and Class members who have yet to sustain a present injury as a stand-alone cause of action as the increased risk of developing the diseases and conditions discussed *supra* constitute an injury-in-fact and also as an element of damages associated with Plaintiffs and Class members other claims for those Plaintiffs and Class members who have sustained a present injury.

243. Under Florida law, a claim for medical monitoring requires: (1) exposure greater than normal background levels; (2) to a proven hazardous substance; (3) caused by the defendant's negligence; (4) as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting a serious latent disease; (5) a monitoring procedure exists that makes the early detection of the disease possible; (6) the prescribed monitoring regime is different from that normally recommended in the absence of the exposure; and (7) the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles. *See Petito*, 750 So. 2d at 106-107; *see also, In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829, 852 (3rd Cir. 1990); *Krottner v. Starbucks Corp.*, 628 F.3d 1139, 1142 (9th Cir. 2010).

244. Defendants knew or should have known that the manner in which they were manufacturing, marketing, and selling AFFF containing PFC's would result in the contamination of the water supplies of fire training academies, like the Fire College.

245. Defendants knew or should have known that exposing humans to PFC-contaminated water would be hazardous to human health and the environment.

246. Here, the Plaintiffs have been exposed to PFOA, PFOS, and potentially other toxic substances at levels greater than normal background levels of PFOS and PFOA, as a direct and proximate result of their use and/or consumption, inhalation or dermal absorption of PFOS and/or PFOA from the Defendants' AFFF products. The Florida DEP's water samples demonstrate that PFOS and PFOA levels detected in the contaminated water supplies at the Fire College, ranging between 250,000 – 270,000 ppt, are more than 3,000 times the EPA's health-safety level of 70 ppt.

247. As such, the Plaintiffs Class members are at an increased risk of developing serious adverse health effects that resulted from the use, storage, and discharge of AFFF at the Fire College.

248. As described more fully above in this Complaint, PFOA and PFOS exposure leads to the bioaccumulation of PFOA and PFOS in the blood, seriously increasing the risk of contracting serious adverse and latent diseases, including, but not limited to, kidney and testicular cancer and related diseases, liver damage, thyroid disease, ulcerative colitis, immune effects and deficiencies, and/or developmental effects to fetuses during pregnancy or to breastfed infants, as a result of being exposed to PFOS and/or PFOA emitted from each Defendant's products. Medical tests currently exist that can determine the level of PFOS and PFOA in the blood.

249. Given that exposure to and bioaccumulation of PFOA and PFOS significantly increases the risk of contracting a serious medical condition, periodic medical examinations to detect latent diseases are both reasonable and necessary. A thorough medical monitoring plan, following common and accepted medical practices, can and should be developed for the Plaintiffs and the Classes to assist in the early detection and beneficial treatment of the diseases that can develop as a result of exposure to PFOS and PFOA.

250. Medical monitoring and testing protocols and procedures exist that make the early detection of the diseases correlated to the exposure to PFOS and PFOA possible and beneficial. These may include a comprehensive medical questionnaire completed by the patient; periodic and comprehensive medical examinations by qualified licensed medical professionals; and specific testing based on the patient's history, PFOS and/or PFOA exposure, symptoms or health consequences, clinical considerations and/or medical examination results. Available laboratory testing includes but is not limited to testing of biomarker and organ system function.

251. For the early detection of the latent diseases alleged herein, the qualified licensed medical professionals may utilize specific evaluations and/or laboratory testing of biomarker and organ system function as follows:

- a. Thyroid function:
 - (1) Thyroid stimulating hormone (TSH); and
 - (2) Free thyroxine (FT4)

- b. Liver function:
 - (1) Albumin;
 - (2) Aspartate Aminotransferase (AST/SGOT);
 - (3) Alanine Aminotransferase (ALT/SGPT);
 - (4) γ -glutamyltransferase (GGT);
 - (5) Bilirubin; and
 - (6) Alkaline Phosphatase

- c. Uric Acid:
 - (1) Serum

- d. Kidney Cancer:
 - (1) Urinalysis

- e. Lipids:
 - (1) Total cholesterol;
 - (2) High-density lipoprotein (HDL);

- (3) Low-density lipoprotein (LDL); and
- (4) Total triglycerides
- f. Evaluation for testicular cancer:
 - (1) Scrotal ultrasound followed by radiographic testing, measurement of serum tumor markers;
 - (2) Radical inguinal orchiectomy; and/or
 - (3) Retroperitoneal lymph node dissection
- g. Evaluation for kidney cancer:
 - (1) Urine culture
 - (2) Ultrasound of kidneys;
 - (3) Abdominal pelvic CT scan; and/or
 - (4) Cystoscopy
- h. Reproductive/infertility issues:
 - (1) Evaluation by a fertility specialist if, after 12 months, a couple has failed to conceive
- i. Gestational hypertension:
 - (1) Screening for evidence of gestational hypertension and pre-eclampsia for women in their second and third trimesters of pregnancy
- j. Androgen dysregulation:
 - (1) Evaluations to assess androgen levels
- k. Indications of ulcerative colitis:
 - (1) Evaluation of erythrocyte sedimentation rate;
 - (2) Evaluation of serum C-reactive protein; and/or
 - (3) Colonoscopic evaluation

252. Using the data collected from comprehensive medical questionnaires completed by the patients, periodic and comprehensive medical examinations, laboratory testing and results, and other specialized evaluations, as alleged herein, qualified licensed medical professionals may

predict, detect, and treat these diseases early, thus benefiting the Plaintiffs and Class Members and reducing the likelihood of their premature morbidity, disability, or mortality.

253. Accordingly, Plaintiffs and the Classes seek damages from the Defendants, including an order requiring them to fund a medical monitoring program to be created, supervised and implemented by the court in equity.

WHEREFORE, Plaintiffs, for themselves and on behalf of all others similarly situated, pray for judgment against the Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co.); TYCO FIRE PRODUCTS L.P., as successor-in-interest to THE ANSUL COMPANY; BUCKEYE FIRE EQUIPMENT CO.; CHEMGUARD, INC.; NATIONAL FOAM, INC.; KIDDE FIRE FIGHTING, INC. (f/k/a CHUBB NATIONAL FOAM, INC. f/k/a NATIONAL FOAM, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE PLC, INC. (f/k/a WILLIAMS US INC. f/k/a WILLIAMS HOLDINGS, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE-FENWAL, INC. (f/k/a FENWAL INC.), individually and as successor-in-interest to NATIONAL FOAM, INC.; and UTC FIRE & SECURITY AMERICAS CORPORATION, INC. (f/k/a GE INTERLOGIX, INC.), individually and as successor-in-interest to NATIONAL FOAM, INC., for damages in excess of Five Million Dollars (\$5,000,000), for interest, and for such other and further relief both at law and in equity to which Plaintiffs and Class Members may show to be justly entitled, and demand a trial by jury of all issues triable as a matter of right by a jury.

**COUNT IV – LOSS OF CONSORTIUM CLAIM ON BEHALF OF
GERALD SMITH, DAVID PRINGLE, AND ALL OTHERS SIMILARLY SITUATED**

254. Plaintiffs adopt, reallege and incorporate the allegations in paragraphs 1 through 190 above, and further allege the following:

255. As a direct and proximate result of the foregoing allegations and injuries alleged in Counts I and Count II, above, Plaintiffs' spouses, Gerald Smith and David Pringle, for themselves and on behalf of all others similarly situated, have suffered and will continue to suffer from the loss of their spouse's services, support, income, consortium and the care and comfort of their society; and due to the injuries and disabilities suffered by Plaintiffs, Carol Smith and Anita Pringle, as alleged herein, Plaintiffs' spouses have also incurred and will continue to incur expenses for medical attention rendered to their spouse.

WHEREFORE, Plaintiffs, for themselves and on behalf of all others similarly situated, pray for judgment against the Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co.); TYCO FIRE PRODUCTS L.P., as successor-in-interest to THE ANSUL COMPANY; BUCKEYE FIRE EQUIPMENT CO.; CHEMGUARD, INC.; NATIONAL FOAM, INC.; KIDDE FIRE FIGHTING, INC. (f/k/a CHUBB NATIONAL FOAM, INC. f/k/a NATIONAL FOAM, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE PLC, INC. (f/k/a WILLIAMS US INC. f/k/a WILLIAMS HOLDINGS, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE-FENWAL, INC. (f/k/a FENWAL INC.), individually and as successor-in-interest to NATIONAL FOAM, INC.; and UTC FIRE & SECURITY AMERICAS CORPORATION, INC. (f/k/a GE INTERLOGIX, INC.), individually and as successor-in-interest to NATIONAL FOAM, INC., for damages in excess of Five Million Dollars (\$5,000,000), for interest, and for such other and further relief both at law and in equity to which Plaintiffs and Class Members may show to be justly entitled, and demand a trial by jury of all issues triable as a matter of right by a jury.

VII. PUNITIVE DAMAGES

256. Plaintiffs adopt, reallege and incorporate the allegations in paragraphs 1 through 190 above, and further allege the following:

257. At all times material, the Defendants had actual knowledge of the wrongfulness of their conduct and the high probability that injury or damage to the Plaintiffs and Class members would result, and despite that knowledge, willfully, wantonly, and recklessly pursued their course of conduct.

258. The Defendants' conduct was so gross and flagrant as to show a reckless disregard or a conscious wanton, reckless indifference to consequences or a grossly careless disregard for the life, safety, or rights of the Plaintiffs and Class members, and the Defendants actively and knowingly participated in such conduct, and/or their officers, directors, or managers knowingly condoned, ratified or consented to such conduct.

259. Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to Defendants' failure to take all reasonable measures to ensure PFOA and PFOS, which they knew to be carcinogenic, was not ingested by Plaintiffs and the Class, warranting the imposition of punitive damages.

WHEREFORE, Plaintiffs, for themselves and on behalf of all others similarly situated, pray for judgment against the Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co.); TYCO FIRE PRODUCTS L.P., as successor-in-interest to THE ANSUL COMPANY; BUCKEYE FIRE EQUIPMENT CO.; CHEMGUARD, INC.; NATIONAL FOAM, INC.; KIDDE FIRE FIGHTING, INC. (f/k/a CHUBB NATIONAL FOAM, INC. f/k/a NATIONAL FOAM, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE PLC, INC. (f/k/a WILLIAMS US INC. f/k/a WILLIAMS HOLDINGS, INC.), individually and as successor in interest to NATIONAL FOAM, INC.; KIDDE-FENWAL, INC.

(f/k/a FENWAL INC.), individually and as successor-in-interest to NATIONAL FOAM, INC.; and UTC FIRE & SECURITY AMERICAS CORPORATION, INC. (f/k/a GE INTERLOGIX, INC.), individually and as successor-in-interest to NATIONAL FOAM, INC., for damages in excess of Five Million Dollars (\$5,000,000), for interest, and for such other and further relief both at law and in equity to which Plaintiffs and Class Members may show to be justly entitled, including punitive damages, and demand a trial by jury of all issues triable as a matter of right by a jury.

VIII. PRAYER FOR RELIEF

260. WHEREFORE, Plaintiffs, DAVID BATTISTI, REGINA SAUERACKER, MARY ANN BENSON, SUSAN SCHELL, CAROL SMITH and GERALD SMITH, her husband, and ANITA PRINGLE and DAVID PRINGLE, her husband, for themselves and on behalf of all others similarly situated, demand judgment against Defendants, and each of them, jointly and severally, and request the following relief from the Court:

- a. certification of the proposed Classes;
- b. a declaration that Defendants acted with negligence, gross negligence, and/or willful, wanton, and careless disregard for the health, safety, and property of Plaintiffs and members of the Classes;
- c. an order establishing a medical monitoring protocol for Plaintiffs and the Class;
- d. an order requiring that Defendants to fund the medical monitoring protocol;
- e. an award to Plaintiffs and the Class of general, compensatory, exemplary, consequential, nominal, and punitive damages;
- f. an order for an award of attorney fees and costs, as provided by law;
- g. an award of pre-judgment and post-judgment interest as provided by law; and
- h. an order for all such other relief the Court deems just and proper.

IX. DEMAND FOR JURY TRIAL

261. Plaintiffs, DAVID BATTISTI, REGINA SAUERACKER, MARY ANN BENSON, SUSAN SCHELL, CAROL SMITH and GERALD SMITH, her husband, and ANITA PRINGLE and DAVID PRINGLE, her husband, for themselves and on behalf of all others similarly situated, demand a trial by jury of all issues so triable as a matter of right.

DATED this 20th day of December, 2018.

Respectfully submitted,

THE FERRARO LAW FIRM

/s/ James L. Ferraro

James L. Ferraro, Esq.

Florida Bar No.: 381659

jlf@ferrarolaw.com

Janpaul Portal, Esq.

Florida Bar No.: 0567264

jpp@ferrarolaw.com

James L. Ferraro, Jr., Esq.

Florida Bar No.: 107494

jjr@ferrarolaw.com

Brickell World Plaza

600 Brickell Avenue, 38th Floor

Miami, Florida 33131

Telephone (305) 375-0111

Facsimile (305) 379-6222