

STATE OF MICHIGAN
CIRCUIT COURT FOR THE 22ND JUDICIAL CIRCUIT
WASHTENAW COUNTY

ATTORNEY GENERAL DANA NESSEL, on
behalf of the People of the State of Michigan,
and the STATE OF MICHIGAN,

No. 2020-_____ -NZ

HON.

Plaintiffs,

v

COMPLAINT

3M COMPANY, E. I. DU PONT DE
NEMOURS AND COMPANY, THE
CHEMOURS COMPANY, THE CHEMOURS
COMPANY FC, LLC, DOWDUPONT, INC.,
CORTEVA, INC., DUPONT DE NEMOURS,
INC., DYNEON, L.L.C., ARCHROMA U.S.,
INC., ARCHROMA MANAGEMENT, LLC,
ARKEMA, INC., ARKEMA FRANCE, S.A.,
AGC CHEMICALS AMERICAS INC., DAIKIN
AMERICA, INC., DAIKIN INDUSTRIES,
LTD., SOLVAY SPECIALTY POLYMERS,
USA, LLC, and ASAHI KASEI PLASTICS
NORTH AMERICA, INC.,

Defendants.

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There are no other civil actions arising from the facts or occurrences pending before this Court or previously dismissed between the Parties.

COMPLAINT

Plaintiffs, Attorney General Dana Nessel, on behalf of the People of the State of Michigan, and the State of Michigan (collectively, State or Michigan), seek to hold some of the largest chemical companies in the world accountable for their culpable conduct and to recover the funds and resources necessary for Michigan to continue identifying, monitoring, and remediating perfluoroalkyl and polyfluoroalkyl substances (a group of chemicals commonly referred to as PFAS) contamination throughout the State.

Michigan brings this civil action for natural resource and punitive damages and injunctive, equitable, and other relief to require Defendants 3M Company (a/k/a Minnesota Mining and Manufacturing Company); E. I. du Pont de Nemours and Company; The Chemours Company; The Chemours Company FC, LLC; DowDuPont Inc.; Corteva, Inc.; DuPont de Nemours, Inc.; Dyneon, L.L.C.; Archroma U.S., Inc., Archroma Management, LLC; Arkema, Inc.; Arkema France, S.A.; AGC Chemicals Americas, Inc.; Daikin America, Inc.; Daikin Industries, Ltd.; Solvay Specialty Polymers, USA, LLC; and Asahi Kasei Plastics North America, Inc. (collectively, Defendants) to protect and restore Michigan's precious natural resources from widespread contamination and injury caused by PFAS, and for its Complaint states as follows:

INTRODUCTION AND NATURE OF THE ACTION

1. Michigan is the largest state east of the Mississippi, and the Great Lakes surrounding the State contain 20% of the world's fresh water.
2. Michigan is also one of the most populated states in the country with over 10,000,000 citizens and boasts a large and diverse economy.
3. Michigan has established itself as a leader in protecting the environment and in identifying, monitoring, and addressing contamination caused by PFAS in Michigan.
4. PFAS are a group of synthetic chemicals that do not occur naturally in the environment and have been in use since the 1940s.¹
5. PFAS are found in a wide array of consumer and industrial products.²
6. In 2019, it came to light that “[c]ompanies such as 3M and DuPont, which used PFAS to make household products that Americans used in their homes every day like Teflon and Scotch Guard knew for decades that these chemicals were toxic.”³

¹ U.S. Environmental Protection Agency, *EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, p 1, https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf (February 2019) (accessed January 9, 2020).

² *EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, *supra* n. 1, p 1.

³ *The Devil They Knew: PFAS Contamination and the Need for Corporate Accountability, Hearing Before the Subcommittee on Environment of the Committee on Oversight and Reform*, 116th Congress 1 (2019) (statement of Rep. Rouda, chairman of the subcommittee), p 2, *available at* <https://docs.house.gov/meetings/GO/GO28/20190724/109847/HHRG-116-GO28-Transcript-20190724.pdf>.

7. PFAS manufacturers have consistently and publicly denied that PFAS present any harm to human health or the environment. As of the date of the filing of this complaint, a website sponsored by Defendant 3M asserts that “the weight of scientific evidence does not show that PFOS or PFOA causes harm to the environment or people at current or historical levels.”⁴

8. The U.S. Environmental Protection Agency (the U.S. EPA), however, concluded that human epidemiology data report associations between certain PFAS exposure and high cholesterol, increased liver enzymes, decreased vaccination response, thyroid disorders, pregnancy-induced hypertension and preeclampsia, and cancer (testicular and kidney).

9. Michigan took swift action following the U.S. EPA’s report to determine whether PFAS existed in its residents’ drinking water sources.

10. In 2017, (then) Michigan Governor Rick Snyder established the Michigan PFAS Action Response Team (MPART) to initiate a multifaceted approach to research, identify, and establish PFAS response actions relative to the discovery, communication, and mitigation of PFAS.

11. In 2018, Michigan, through MPART, became the first state in the United States to conduct a comprehensive, state-wide drinking water study. MPART’s testing included the sampling of 1,115 community public water supplies, 460 drinking water wells maintained by schools, and 165 drinking water wells

⁴ PFASfacts, *The Facts on PFAS*, <https://www.pfasfacts.com/> (accessed January 9, 2020).

maintained by childcare providers or Michigan Head Start programs (MPART Study Phase I).

12. In 2019, Michigan expanded the MPART Study to include a state-wide drinking water sample survey of approximately 716 additional public water supplies, which provide drinking water for sensitive populations (MPART Study Phase II).

13. In 2018 and 2019, throughout MPART Study Phase I and Phase II, MPART received drinking water sample analytical results for individual sample locations, which MPART reviewed, reported to the public water supply and to the public, and took immediate action when necessary.

14. Michigan received the final report for the MPART Study Phase I in 2019, although Michigan took necessary action while the study was being conducted when it received individual results that required immediate attention.

15. By the conclusion of MPART Study Phase I and Phase II, Michigan first discovered that approximately 10% of its public drinking water supplies contained some levels of PFAS.

16. The State continues to take necessary actions to protect its natural resources and its residents from harm caused by PFAS contamination.

17. For purposes of this Complaint, PFAS includes, but is not limited to, the following list of substances (including the chemicals themselves, as well as all of their salts, ionic states, and acid forms of molecules, as well as their “precursor” chemicals):

- (a) Perfluorooctanoic acid (PFOA) (Fluorinated Carbon Chain Length: C₈) (Chemical Abstract Services Registry Number (CASRN): 335-67-1);
- (b) Perfluorooctanesulfonic acid (PFOS) (Fluorinated Carbon Chain Length: C₈) (CASRN: 1763-23-1);
- (c) Perfluorononanoic acid (PFNA) (Fluorinated Carbon Chain Length: C₉) (CASRN: 375-95-1);
- (d) Perfluorohexanoic acid (PFHxA) (Fluorinated Carbon Chain Length: C₆) (CASRN: 307-24-4);
- (e) Perfluorohexanesulfonic acid (PFHxS) (Fluorinated Carbon Chain Length: C₆) (CASRN: 355-46-4);
- (f) Perfluorobutanesulfonic acid (PFBS) (Fluorinated Carbon Chain Length: C₄) (CASRN: 375-73-5);
- (g) Hexafluoropropylene oxide dimer acid (HFPO-DA or GenX) (Fluorinated Carbon Chain Length: C₆) (CASRN: 13252-13-6^a);
- (h) Perfluorotetradecanoic acid (PFTeA) (Fluorinated Carbon Chain Length: C₁₄) (CASRN: 376-06-7);
- (i) Perfluorotridecanoic acid (PFTriA) (Fluorinated Carbon Chain Length: C₁₃) (CASRN: 72629-94-8);
- (j) Perfluorododecanoic acid (PFDoA) (Fluorinated Carbon Chain Length: C₁₂) (CASRN: 307-55-1);
- (k) Perfluoroundecanoic acid (PFUnA) (Fluorinated Carbon Chain Length: C₁₁) (CASRN: 2058-94-8);
- (l) Perfluorodecanoic acid (PFDA) (Fluorinated Carbon Chain Length: C₁₀) (CASRN: 335-76-2);
- (m) Perfluoroheptanoic acid (PFHpA) (Fluorinated Carbon Chain Length: C₇) (CASRN: 375-85-9);
- (n) Perfluoropentanoic acid (PFPeA) (Fluorinated Carbon Chain Length: C₅) (CASRN: 2706-90-3);
- (o) Perfluorobutanoic acid (PFBA) (Fluorinated Carbon Chain Length: C₄) (CASRN: 375-22-4);

- (p) Perfluorodecanesulfonic acid (PFDS) (Fluorinated Carbon Chain Length: C₁₀) (CASRN: 335-77-3);
- (q) Perfluorononanesulfonic acid (PFNS) (Fluorinated Carbon Chain Length: C₉) (CASRN: 68259-12-1);
- (r) Perfluoroheptanesulfonic acid (PFHpS) (Fluorinated Carbon Chain Length: C₇) (CASRN: 375-92-8);
- (s) Perfluoropentanesulfonic acid (PFPeS) (Fluorinated Carbon Chain Length: C₅) (CASRN: 2706-91-4);
- (t) Perfluorooctanesulfonamide (PFOSA) (Fluorinated Carbon Chain Length: C₈) (CASRN: 754-91-6);
- (u) Fluorotelomer sulphonic acid 8:2 (FtS 8:2) (Fluorinated Carbon Chain Length: C₈) (CASRN: 39108-34-4);
- (v) Fluorotelomer sulphonic acid 6:2 (FtS 6:2) (Fluorinated Carbon Chain Length: C₆) (CASRN: 27619-97-2);
- (w) Fluorotelomer sulphonic acid 4:2 (FtS 4:2) (Fluorinated Carbon Chain Length: C₄) (CASRN: 757124-72-4);
- (x) 2-(N-Ethylperfluorooctanesulfonamido) acetic acid (N-EtFOSAA) (Fluorinated Carbon Chain Length: C₈) (CASRN: 2991-50-6);
- (y) 2-(N-Methylperfluorooctanesulfonamido) acetic acid (N-MeFOSAA) (Fluorinated Carbon Chain Length: C₈) (CASRN: 2355-31-9);
- (z) 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) (Fluorinated Carbon Chain Length: C₁₀) (CASRN: 763051-92-9^b);
- (aa) 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS) (Fluorinated Carbon Chain Length: C₈) (CASRN: 756426-58-1^c);

(bb) 4,8-dioxa-3H-perfluorononanoic acid (ADONA) (Fluorinated Carbon Chain Length: C₇) (CASRN: 919005-14-4^d).⁵

18. There may be more than 5,000 different types of PFAS. To be sure, the list contained in the above paragraph is not a complete list of PFAS that are the subject of this Complaint. The Complaint encompasses all of the thousands of PFAS, known or unknown. Plaintiff reserves its right to identify additional PFAS through discovery and as the science and research on the emerging PFAS crisis develops.

19. As described in paragraph 17, above, PFAS as defined in this Complaint does not include aqueous film-forming foams (AFFFs) of any kind or type containing PFOA and/or PFOS, or otherwise.

20. Michigan brings this action against all Defendants pursuant to Part 201 of the NREPA (MCL 324.20101–324.20142), Part 17 of the Natural Resources and Environmental Protection Act (NREPA) (MCL 324.1701–324.1706), and Part 31 of the NREPA (MCL 324.3101–324.3134), as well as Michigan’s laws of negligence, trespass, public nuisance, and unjust enrichment.

⁵ The State already has investigated and set specific Health-Based Values for the specific types of PFAS set forth in (a)–(g) above and is in the process of studying the specific types of PFAS set forth in (h)–(bb). See Michigan Science Advisory Workgroup, *Health-Based Drinking Water Value Recommendations for PFAS in Michigan*, https://www.michigan.gov/documents/pfasresponse/Health-Based_Drinking_Water_Value_Recommendations_for_PFAS_in_Michigan_Report_659258_7.pdf (June 27, 2019) (accessed January 10, 2020).

21. Michigan also brings claims against Historical DuPont, Corteva, Inc., DuPont De Nemours, Inc., and The Chemours Company pursuant to the Michigan Uniform Fraudulent Transfer Act (MUFTA) (collectively, MUFTA Defendants), MCL 566.31 *et seq.*

PARTIES

I. Plaintiff.

22. Plaintiffs are Attorney General Dana Nessel, on behalf of the People of the State of Michigan, and the State of Michigan (collectively, State or Michigan).

23. The State maintains its principal office at 525 West Ottawa Street, Lansing, Michigan 48933.

24. The State brings this action in its capacity as sovereign, as trustee of State natural resources (or of substantial interest in property) contaminated and injured by Defendants, and pursuant to its *parens patriae* authority on behalf of the residents of Michigan.

25. The Attorney General has statutory and common law authority to appear on behalf of the people of the State of Michigan in any cause or matter, and this authority is liberally construed. See MCL 14.28; *Michigan State Chiropractic Ass'n v Kelley*, 79 Mich App 789, 791 (1977).

26. In addition, the Attorney General is explicitly authorized to commence a civil action under Parts 201, 17, and 31 of the Natural Resources and Environmental Protection Act (NREPA).

27. The State also brings this action based upon its statutory authority to protect State natural resources and property, and its common law police power. This power includes, but is not limited to, its power to prevent pollution of the State's natural resources and property, to prevent nuisances, and to prevent and abate hazards to public health, safety, welfare, and the environment.

MCL 324.1701.

II. Defendants.

28. Defendants knew or should have known that the PFAS and PFAS-containing products, each of which they designed, marketed, developed, distributed, sold, manufactured, released, supplied, transported, arranged for disposal or treatment of, handled, and/or used in Michigan would be delivered and disposed into areas affecting the State's natural resources and property.

29. Defendant 3M Company (3M) is a Delaware corporation with its principal place of business at 3M Center, St. Paul, Minnesota 55144.

30. 3M may be served with process through its registered agent, CSC-Lawyers Incorporating Service, 601 Abbot Road, East Lansing, Michigan 48823.

31. 3M conducts business at numerous locations throughout the United States and Michigan, including 11900 East 8 Mile Road, Detroit, Michigan 48205, and 19460 Victor Pkwy, Livonia, Michigan 48152.

32. Defendant E.I. du Pont de Nemours and Company (Historical DuPont) is a Delaware corporation with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805.

33. Historical DuPont may be served with process through its registered agent, The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

34. Historical DuPont conducts or has conducted business throughout the United States, including in the State of Michigan.

35. Defendant The Chemours Company is a Delaware corporation with its principal place of business at 1007 Market Street, Wilmington, Delaware 19899.

36. The Chemours Company may be served with process through its registered agent, The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

37. The Chemours Company conducts business throughout the United States, including in the State of Michigan.

38. The Chemours Company was incorporated as a subsidiary of Historical DuPont as of April 30, 2015.

39. From April 30, 2015 until July 2015, The Chemours Company was a wholly-owned subsidiary of Historical DuPont.

40. In July 2015, Historical DuPont spun off The Chemours Company and transferred to The Chemours Company its “performance chemicals” business line, which includes its fluoroproducts business, and distributed shares of The Chemours Company stock to Historical DuPont stockholders.

41. The Chemours Company has since been an independent, publicly-traded company.

42. Defendant The Chemours Company FC, LLC is a Delaware corporation with its principal place of business at 1007 Market Street, Wilmington, Delaware 19899.

43. The Chemours Company FC, LLC may be served with process through its registered agent The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

44. The Chemours Company FC, LLC conducts business throughout the United States, including in the State of Michigan.

45. The Chemours Company FC, LLC operates as a subsidiary of The Chemours Company and manufactures fluoropolymer resins.

46. The Chemours Company and The Chemours Company FC, LLC are collectively referred to throughout this Complaint as “Chemours.”

47. Historical DuPont merged with The Dow Chemical Company in August 2017 to create Defendant DowDuPont, Inc. (DowDuPont).

48. Historical DuPont and The Dow Chemical Company each merged with wholly-owned subsidiaries of DowDuPont and, as a result, became subsidiaries of DowDuPont. Since the time of the merger, DowDuPont has effected a series of separation transactions to separate its businesses into three independent, publicly-traded companies for each of its agriculture, materials science, and specialty products businesses, discussed herein.

49. DowDuPont is a Delaware corporation with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805.

50. DowDuPont may be served with process through its registered agent The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

51. DowDuPont conducts business throughout the United States, including in the State of Michigan.

52. Defendant Corteva, Inc. is a Delaware corporation with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805.

53. Corteva, Inc. may be served with process through its registered agent The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

54. Corteva, Inc. conducts business throughout the United States, including in the State of Michigan.

55. On June 1, 2019, DowDuPont separated its agriculture business by spinning it off into Corteva, Inc.

56. Corteva, Inc. was initially formed in February 2018.

57. From February 2018 until June 1, 2019, Corteva was a wholly-owned subsidiary of DowDuPont.

58. On June 1, 2019, DowDuPont distributed to DowDuPont stockholders all issued and outstanding shares of Corteva, Inc. common stock by way of a pro rata dividend.

59. Following the June 1, 2019 stock distribution, Corteva, Inc. became (and remains) the direct parent of Historical DuPont and holds certain DowDuPont assets and liabilities, including DowDuPont's agriculture and nutritional businesses.

60. On June 1, 2019, DowDuPont, the surviving entity after the spin-off of Corteva, Inc. and of another entity known as Dow, Inc., changed its name to DuPont de Nemours, Inc.

61. DuPont de Nemours, Inc. retained assets in the specialty products business lines following the above described spin-offs, as well as the balance of the financial assets and liabilities of Historical DuPont not assumed by Corteva, Inc.

62. Defendant DuPont de Nemours, Inc. (f/k/a DowDuPont Inc.) (New DuPont) is a Delaware corporation with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805.

63. New DuPont may be served with process through its registered agent The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

64. New DuPont conducts business throughout the United States, including in the State of Michigan.

65. Defendants E. I. du Pont de Nemours and Company (Historical DuPont); The Chemours Company; The Chemours Company FC, LLC; Corteva, Inc.; and DuPont de Nemours, Inc. (New DuPont) are collectively referred to as "DuPont" throughout this Complaint.

66. DuPont conducts business in Michigan at numerous locations, including 190 Uran Street, Hillsdale, Michigan 49242; 1250 Harmon Road, Auburn Hills, Michigan 48326; and 311 James Savage Road, Midland, Michigan 48642.

67. Defendant Dyneon, L.L.C. (Dyneon) is a limited liability company organized and existing under the laws of the State of Delaware with its principal place of business at 6744 33rd Street North, Oakdale, Minnesota 55128.

68. Dyneon may be served with process through its registered agent, The Corporation Company, 30600 Telegraph Road #2345, Bingham Farms, Michigan 48025.

69. Dyneon conducts business throughout the United States, including in the State of Michigan.

70. Defendant Archroma U.S., Inc. is a Delaware corporation with its principal place of business located at 5435 77 Center Drive, Charlotte, North Carolina 28217.

71. Defendant Archroma U.S., Inc. may be served with process through its registered agent, The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48107.

72. Defendant Archroma U.S., Inc. conducts business throughout the United States, including in the State of Michigan.

73. Defendant Archroma U.S., Inc. is the operating subsidiary of Defendant Archroma Management, LLC (collectively, Archroma), is a corporation existing under the laws of the country of Switzerland with its principal place of business at Neuhofstrasse 11, 4153 Reinach Basel, Switzerland.

74. Defendant Arkema, Inc. is a Pennsylvania corporation with its principal place of business at 900 First Avenue, King of Prussia, Pennsylvania 19406.

75. Arkema, Inc. may be served with process through its registered agent, CSC-Lawyers Incorporating Service, 601 Abbot Road, East Lansing, Michigan 48823.

76. Defendant Arkema, Inc. conducts business throughout the United States, including in the State Michigan.

77. Defendant Arkema, Inc. is the operating subsidiary of Defendant Arkema France, S.A. Defendant Arkema France, S.A., is a publicly traded foreign corporation having its principal place of business at 420 Rue d'Estienne d'Orves, 92700 Colombes, France.

78. Defendant Arkema France, S.A., is the parent corporation of Defendant Arkema, Inc.

79. Defendant Arkema France, S.A. and Defendant Arkema, Inc. are collectively referred to herein as "Arkema."

80. Arkema conducts business at numerous locations throughout the United States and in the State of Michigan, including 1415 Steele Avenue SW, Grand Rapids, Michigan 49507.

81. Defendant AGC Chemicals Americas, Inc. (AGCCA), is a Delaware corporation with its principal place of business at 55 East Uwchlan Avenue, Suite 201, Exton, Pennsylvania 19341.

82. AGCCA may be served with process through its registered agent, The Corporation Company, 40600 Ann Arbor Road E, Suite 201, Plymouth, Michigan 48170.

83. AGCCA conducts business at numerous locations throughout the United States and in the State of Michigan, including 1401 Huron Street, Ypsilanti, Michigan 48197, and 34505 West 12 Mile Road, Suite 300, Farmington Hills, Michigan 48331.

84. Defendant Daikin America, Inc. is a Delaware corporation with its principal place of business at 20 Olympic Drive, Orangeburg, New York 10962.

85. Defendant Daikin America, Inc. may be served with process through its registered agent, Sadashige Irie, 28317 Beck Road, Suite E2, Wixom, Michigan 48393.

86. Defendant Daikin America, Inc. conducts business throughout the United States, including in the State of Michigan.

87. Defendant Daikin America, Inc. is the operating subsidiary of Defendant Daikin Industries, Ltd., a corporation existing under the laws of Japan with its principal place of business at Umeda Centre Bldg., 2-4-12 Nakazaki-Nishi, Kita-ku, Osaka 503-8323, Japan.

88. Defendant Daikin Industries, Ltd. conducts business throughout the United States, including in the State of Michigan.

89. Defendant Daikin Industries, Ltd. and Defendant Daikin America, Inc. are collectively referred to herein as “Daikin.”

90. Defendant Solvay Specialty Polymers, USA, LLC (Solvay) is a Delaware corporation with its principal place of business at 4500 McGinnis Ferry Road, Alpharetta, Georgia 30004.

91. Solvay may be served with process through its registered agent, CSC-Lawyers Incorporating Service, 601 Abbot Road, East Lansing, Michigan 48823.

92. Solvay conducts business throughout the United States, including in the State of Michigan.

93. Defendant Asahi Kasei Plastics North America, Inc. (f/k/a Thermofil, Inc.) (Asahi Kasei) is a Michigan corporation with its principal place of business at 900 E. Van Riper Road, Fowlerville, Michigan 48836.

94. Defendant Asahi Kasei may be served with process through its registered agent, The Corporation Company, 40600 Ann Arbor Road E., Suite 201, Plymouth, Michigan 48170.

95. Asahi Kasei conducts business throughout the United States, including in the State of Michigan.

96. Asahi Kasei owns and/or owned a facility located at 6105 Whitmore Lake Road, Green Oaks Township, Livingston County, Michigan 48180 (the Thermofil Site).

97. Asahi Kasei operates and/or operated a plastic compounding business at the Thermofil Site.

98. The State's investigation, as further discussed in Section VI, has confirmed significant PFAS releases at and around the Thermofil Site.

99. Asahi Kasei handled, stored, treated, transported, and/or disposed of solid and hazardous PFAS and/or solid and hazardous waste containing PFAS in such a manner to cause PFAS to release into the environment, therefore creating imminent and substantial danger to human health and the environment while operating and/or owning the Thermofil Site.

100. All Defendants: (a) have designed, marketed, developed, distributed, sold, manufactured, released, supplied, transported, arranged for disposal or treatment of, handled, and/or used PFAS and/or PFAS-containing products in Michigan such that PFAS and PFAS-containing products have contaminated and threaten the State's natural resources and property; (b) acted with actual or constructive knowledge that PFAS and PFAS-containing products would be delivered into areas affecting the State's natural resources and property; (c) are legally responsible for and committed each of the wrongful acts alleged in this

Complaint; and (d) promoted PFAS and PFAS-containing products, despite the availability of reasonable alternatives and their actual or constructive knowledge that the contamination alleged in this Complaint would be the inevitable result of their conduct.

101. To the extent any act or omission of any Defendant is alleged in this Complaint, the officers, directors, agents, employees, or representatives of each such Defendant committed or authorized each such act or omission, or failed to adequately supervise or properly control or direct their employees while engaged in the management, direction, operation, or control of the affairs of such Defendants, and did so while acting within the scope of their duties, employment or agency.

102. Any and all references to a Defendant or Defendants in this Complaint include any predecessors, successors, parents, subsidiaries, affiliates, and divisions of the named Defendants.

103. The State's investigation of other entities that have caused PFAS to be released into the environment creating imminent and substantial danger to human health and the environment is ongoing.

JURISDICTION AND VENUE

104. This Court has jurisdiction over the subject matter of this action pursuant to MCL 600.605.

105. This Court may exercise jurisdiction over Defendants because they are or at the relevant times were authorized to do business in Michigan; are or at the relevant times were registered with the Michigan Secretary of State; are or at the

relevant times were transacting business in Michigan, or otherwise intentionally availing themselves of the Michigan market through the design, marketing, development, distribution, sale, manufacture, release, handling, and/or use of PFAS and PFAS-containing products; and/or own, use, possess or at the relevant times owned, used, or possessed certain real and tangible property situated within the State. See MCL 600.715.

106. Because PFAS is not naturally occurring, Defendants' contacts with Michigan are the only possible explanation for the widespread PFAS contamination, causing injury to Michigan's natural resources and residents.

107. Defendants' connections with the State of Michigan are consistent with the requirements of the Due Process Clause of the Fourteenth Amendment given that Defendants have purposefully availed themselves of the privilege of conducting activities in Michigan, the causes of action arise from Defendants' activities in Michigan, and Defendants' activities are so substantially connected to Michigan to make the exercise of jurisdiction over Defendants reasonable. Venue is proper in this Court because the State is the plaintiff and State natural resources and/or property have been contaminated, injured, and/or otherwise damaged by PFAS and PFAS-contamination in Washtenaw County.

FACTUAL ALLEGATIONS

I. PFAS are toxic and pose substantial health and environmental risks.

108. PFAS are a family of chemical compounds containing strong carbon-fluorine bonds.⁶

109. PFAS have been used for decades in a wide array of consumer and industrial products.⁷

110. Among thousands of other uses, PFAS may be used to keep food from sticking to cookware, to make sofas and carpets resistant to stains, to make clothes and mattresses more waterproof, and to make some food packaging resistant to grease absorption.⁸

111. Because PFAS help reduce friction, they are also used in a variety of other industries, including aerospace, automotive, building and construction, and electronics.⁹

112. PFAS are human-made, synthetic chemicals that do not exist naturally in the environment.¹⁰

⁶ EPA's *Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, *supra* n. 1 at 9.

⁷ *Id.* at 1.

⁸ See U.S. Department of Health and Human Services, National Toxicology Program, *Per- and Polyfluoroalkyl Substances (PFAS)*,

https://ntp.niehs.nih.gov/whatwestudy/topics/pfas/index.html?utm_source=direct&utm_medium=prod&utm_campaign=ntpgolinks&utm_term=pfas (accessed January 10, 2020).

⁹ U.S. EPA., *Basic Information on PFAS*, <https://www.epa.gov/pfas/basic-information-pfas> (accessed January 10, 2010).

¹⁰ See, e.g., EPA's *Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, *supra* n. 1 at 1.

113. Known pathways for PFAS to enter the environment include releases to air, land, and water from industrial processes and facilities, from disposal by industrial processes and facilities, and from the normal use, and/or disposal of consumer products that contain PFAS.¹¹

114. PFAS are known as “forever” chemicals, because they are extremely persistent in the environment and resistant to typical environmental degradation processes.¹²

115. PFAS do not break down or biodegrade over time, and instead, accumulate in the environment.¹³

116. PFAS generally absorb poorly and tend to be mobile in soil and groundwater systems.

117. This combination of properties enables PFAS to readily migrate in soil and groundwater.¹⁴

¹¹ See *Basic Information on PFAS*, *supra* n. 9.

¹² See *EPA’s Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, *supra* n. 1 at 1.

¹³ *Basic Information on PFAS*, *supra* n. 9.

¹⁴ John A. Simon, *Editor’s perspective—Per- and polyfluorinated substances pose substantial challenges to remediation practitioners*, *Remediation: The Journal of Environmental Cleanup Costs, Technologies, and Techniques*, 2018;28:3–7, <https://onlinelibrary.wiley.com/doi/full/10.1002/rem.21547> (March 12, 2018) (accessed January 10, 2020).

118. The pernicious characteristics of PFAS mean that once these chemicals are released into the environment, they migrate into and cause extensive contamination and injury to State natural resources and property.¹⁵

119. Humans are exposed to PFAS through ingestion of drinking water and contaminated food, inhalation, dermal contact, and other pathways.¹⁶

120. PFAS bioaccumulate in the human body and can bio-magnify in animals, particularly fish and “top of the food chain” mammals.¹⁷

121. PFAS can even be found in the blood of human infants, and protein-rich breast milk appears to be a source of PFAS exposure.¹⁸

122. Even low doses of PFAS can result in adverse health effects for humans as well as animals.¹⁹

¹⁵ See generally Simon, *supra* n. 14.

¹⁶ See *Basic Information on PFAS*, *supra* n. 9.

¹⁷ See, e.g., NBC News, *Breast-Fed Babies Show Buildup of Potentially Harmful Chemical*, http://www.nbcnews.com/id/57764921/ns/technology_and_science-science/t/breast-fed-babies-show-buildup-potentially-harmful-chemical/#.Xbs7FyhKhMB (August 21, 2015) (accessed January 10, 2020).

¹⁸ See U.S. Dep’t of Health and Human Services, Agency for Toxic Substances and Disease Registry, *Toxicological Profile for Perfluoroalkyls, Draft for Public Comment* (June 2018) (available at <https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf>) (accessed January 10, 2020).

¹⁹ See, e.g., *Health-Based Drinking Water Value Recommendations for PFAS in Michigan*, *supra* n. 5, p 7; see also Michigan PFAS Science Advisory Panel, *Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan* (December 7, 2018) (available at: https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf) (accessed January 10, 2020).

123. Exposure to certain PFAS is correlated with a wide array of harmful and serious health effects in humans and animals, including but not limited to:

- (a) Liver damage;
- (b) Altered cholesterol levels;
- (c) Pregnancy-induced hypertension and/or preeclampsia;
- (d) Thyroid disease;
- (e) Modulation of the immune system;
- (f) Decreased fertility; and
- (g) Decreases in birth weight.²⁰

124. PFAS contamination is a serious threat to human health, as well as to State natural resources and property.

125. Because PFAS are persistent in the environment, unless PFAS are actively cleaned up from contaminated State natural resources and property or otherwise remediated, these chemicals will remain within the State and continue to contaminate State natural resources and property indefinitely.

126. PFAS are difficult and costly to treat and remove from State natural resources and property or otherwise remediate.²¹

²⁰ See *Toxicological Profile for Perfluoroalkyls—Draft for Public Comment*, supra note 17.

²¹ See, e.g., Simon, *supra* n. 14.

II. Defendants manufactured and used PFAS with full knowledge of PFAS health and environmental risks, which they intentionally hid from the public and the State.

127. Defendants designed, marketed, developed, distributed, sold, manufactured, released, supplied, transported, arranged for disposal or treatment, handled, and/or used PFAS and/or PFAS-containing products in Michigan in such a way as to cause harm to the State’s natural resources and its residents.

128. Defendants have known for decades that PFAS are toxic and pose substantial health and environmental risks. Notwithstanding that knowledge, Defendants persistently and intentionally hid this information from Michigan and the public.

129. Defendants “neglected to tell people what was in those products and suppressed the scientific evidence that these chemicals were hazardous.”²²

130. Defendants did not just use PFAS in industrial production; they discharged these chemicals into rivers and into landfills where they seeped into the groundwater.²³

131. Defendants released PFAS into the environment as a result of, or in connection with their design, marketing, development, distribution, sale, manufacturing, release, supply, transport, arrangement for disposal or treatment, handling, and/or use of PFAS and/or PFAS-containing products in Michigan.

²² *The Devil They Knew*, *supra* n. 3.

²³ *Id.*

132. Defendants knew, foresaw, and/or reasonably should have known and/or foreseen that PFAS would contaminate State natural resources and expose the State's residents to harm.

133. The Defendants have earned extraordinary profits from their PFAS-related business practices.²⁴

134. Despite their explicit knowledge of the dangers of PFAS, Defendants deliberately and intentionally concealed the dangers of PFAS from governmental entities, including the State of Michigan and its agencies, and the public at large in order to protect profits and avoid public responsibility for injuries and damage caused by their toxic products.

135. Instead of disclosing the dangers associated with PFAS and/or products containing PFAS, Defendants went to great lengths to falsely promote PFAS and PFAS-containing products as being safe and appropriate for widespread use.

136. Defendants, including at least 3M, continue to deny the adverse effects on the environment and human health caused by PFAS contamination.

137. Defendants repeatedly assured and represented to such entities and to the public that such exposures presented no risk of harm and were of no legal, toxicological, or medical significance of any kind.

²⁴ *Id.*

138. Defendants manufacturing and/or using short-chain PFAS (which include the compound known as GenX) are aware that one or more of such short-chain PFAS also have been found in human blood.

139. Recent scientific studies have indicated that “short-chain PFAS are more widely detected, more persistent and mobile in aquatic systems, and thus may pose broader risks to human and ecosystem health.”²⁵

140. At least one short-chain PFAS has been found to cause the same triad of tumors (Leydig (testicular), liver, and pancreatic) in a chronic rat cancer study as had been found in a chronic rat cancer study with a non-short-chain PFAS.

141. Research and testing performed by and/or on behalf of Defendants making and/or using short-chain PFAS indicates that such short-chain PFAS present the same, similar, and/or additional risks to human health was found in research on other PFAS, including cancer risk.

142. Defendants repeatedly assured and represented to governmental entities and the public—and continue to assure and represent to governmental entities and the public—that the presence of PFAS, including these short-chain PFAS, in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind.²⁶

²⁵ See Fan Li, *et al.* Short-chain per- and polyfluoroalkyl substances in aquatic systems: Occurrence, impacts and treatment, 380 *Chemical Engineering Journal* 1 (2020).

²⁶ See FluoroCouncil, *Fact Checker on FluoroTechnology*; <https://fluorocouncil.com/fluorotechnology/facts/> (accessed January 10, 2020).

143. Defendants Archroma, Arkema France, Chemours, Daikin Industries, Ltd., and Solvay, through their membership in the FluoroCouncil, represent to the public through the FluoroCouncil website that: “The newer, short-chain chemistries currently in use are well studied. . . . [t]he science supports the conclusion that the newer FluoroTechnology is not expected to present a significant risk to humans and the environment.”²⁷

144. At all relevant times, Defendants, individually and/or collectively, have had the resources and ability to fund or sponsor any study, investigation, testing, and/or other research of any kind of the nature Defendants claim is necessary to confirm and/or prove that the presence of any one and/or combination of PFAS in human blood causes any disease and/or adverse health impact of any kind in humans, presents any risk of harm to humans, and/or is of any legal, toxicological, or medical significance to humans, according to standards Defendants deem acceptable.

145. Defendants have intentionally, purposefully, recklessly, and/or negligently chosen not to fund or sponsor any study, investigation, testing, and/or other research described in paragraph 144.

146. At all relevant times, Defendants shared and/or should have shared among themselves, all relevant information relating to the presence, biopersistence, and bioaccumulation of PFAS in in the environment and in human blood and associated toxicological, epidemiological, and/or other adverse effects and/or risks.

²⁷ *Id.*

147. At all relevant times, Defendants, through their acts and/or omissions, controlled, minimized, trivialized, manipulated, and/or otherwise influenced the information that was published in peer-review journals, released by any governmental entity, and/or otherwise made available to the public relating to PFAS in human blood and any alleged adverse impacts and/or risks associated therewith, effectively preventing the State from discovering the existence and extent of any harm as alleged herein.

148. At all relevant times, Defendants, through their acts and/or omissions, took steps to attack, challenge, discredit, and/or otherwise undermine any scientific studies, findings, statements, and/or other information that proposed, alleged, suggested, or even implied any potential adverse environmental damage and health effects or risks and/or any other fact of any legal, toxicological, or medical significance associated with the presence of PFAS in the environment and human blood.

149. At all relevant times, Defendants, through their acts and/or omissions, concealed and/or withheld information from their customers, governmental entities, and the public that would have properly and fully alerted Michigan to the environmental, toxicological, medical, or other significant risks from PFAS contamination.

150. At all relevant times, Defendants encouraged the continued and even further increased use and release into the environment of PFAS, including into Michigan, by their customers and others, and tried to encourage and foster the

increased and further use of PFAS, including in Michigan, in connection with as many products/uses and applications as possible, despite knowledge of the toxicity, persistence, and bioaccumulation concerns associated with such activities.

151. Defendants' negligent, intentional and reckless actions have contaminated the natural resources of Michigan, harmed Michigan property, and placed Michigan residents at risk.

III. Defendants failed to act on their knowledge of PFAS health and environmental risks.

152. Despite their knowledge that PFAS posed environmental and human health risks, and despite the availability of reasonable alternatives, Defendants failed to warn customers, users, the public, or the State, and failed to take any other appropriate precautionary measures to prevent or mitigate such contamination. Instead, Defendants promoted PFAS, and products containing PFAS, as being environmentally sound and appropriate for widespread use.²⁸

153. At all times relevant to this litigation, Defendants were or should have been aware that PFAS contamination and injury of State natural resources and property was inevitable, due to PFAS's solubility, recalcitrance to biodegradation

²⁸ See, e.g., E-mail from Susan M. Stalnecker (DuPont) to several other DuPont employees re: Fw: URGENT:Script (February 16, 2006) ("We need to [*sic*] EPA to quickly (like first thing tomorrow) say the following: 1. Consumer products sold under the Teflon brand are safe. These include the non-stick cookware in your kitchen, the stain resistant carpet in your family room, and the waterproof jackets in your closets [*sic*], among other products which are valued by consumers and offer unique and important benefits. 2. Further, to date, there are no human health effects known to be caused by PFOA.").

and bioremediation, and the normal and foreseen use of PFAS in industrial processes, and in consumer, household, and commercial products manufactured, distributed, sold, and used in Michigan.

154. Defendants possess—and have always possessed—vastly superior knowledge, resources, experience, and other advantages, in comparison to anyone or any agency, concerning the manufacture, distribution, nature, and properties of PFAS and PFAS-containing products.

155. By virtue of their tremendous economic power and analytical resources, including the employment of scientists such as chemists, engineers, and toxicologists, Defendants have at all relevant times been in a position to know, identify, and confirm the threat PFAS posed and poses to State natural resources, property, and the health of residents.

156. In addition, by virtue of this superior knowledge, and/or by virtue of Defendants' partial and incorrect statements regarding the nature and impacts of PFAS, Defendants had a duty to disclose the truth and to act in accordance with the truth about PFAS.

IV. Historical DuPont's spinoff of The Chemours Company.

157. Chemours was organized by DuPont in the state of Delaware on February 18, 2014 as Performance Operations, LLC, for the purpose of transferring to Chemours assets and liabilities, including any entities holding assets and liabilities, associated with certain of DuPont's Performance Chemicals segment. Chemours changed its name to The Chemours Company, LLC on April 15, 2014.

The Chemours Company, LLC had nominal operations during the period from February 18, 2014 through December 31, 2014. The Chemours Company, LLC was converted from a limited liability company to a Delaware corporation on April 30, 2015.²⁹

158. In July 2015, Historical DuPont transferred to The Chemours Company its “performance chemicals” business line, including titanium technologies, fluoroproducts, and chemical solutions.³⁰

159. In addition to the transfer of assets, The Chemours Company accepted broad assumption of many liabilities for Historical DuPont’s historical use, manufacture, and discharge of PFAS, although the specific details regarding the liabilities that The Chemours Company assumed are set forth in the non-public schedules.³¹

160. The transfer to The Chemours Company of Historical DuPont’s performance chemicals business line, which was loaded with failing products and substantial debts, as well as many environmental liabilities from Historical DuPont, which were known by Historical DuPont to be extraordinarily large,

²⁹ See The Chemours Company SEC Information Statement Summary, <https://www.sec.gov/Archives/edgar/data/1627223/000119312515215110/d832629dex991.htm> (June 5, 2015) (accessed January 10, 2020).

³⁰ See *Id.*

³¹ See generally, Separation Agreement by and between E. I. DuPont de Nemours and Company and The Chemours Company (Separation Agreement), <https://www.sec.gov/Archives/edgar/data/30554/000003055415000065/exhibit21separationagreeme.htm> (June 26, 2015) (accessed January 10, 2020).

resulted in a transfer in which The Chemours Company did not receive a reasonably equivalent value in exchange for the transfer or obligation.

161. Further, the assets transferred to The Chemours Company were unreasonably small in relation to the business or transaction. Historical DuPont believed or reasonably should have believed that The Chemours Company would incur debts beyond its ability to pay them as they became due.

162. At the time of those transfers, the performance chemicals business line carried an estimated debt and/or liabilities of approximately \$4 billion.

163. In 2015, prices of Titanium Dioxide plummeted, significantly decreasing the value of Historical DuPont's titanium technologies business line.³²

164. Historical DuPont had also promised to phase out production and use of PFOA, a major component of its fluoroproducts line, by 2015.

165. Under the Separation Agreement, The Chemours Company agreed to indemnify Historical DuPont against, and assumed for itself, all "Chemours Liabilities," which is defined broadly to include, among other things, "any and all liabilities relating," "primarily to, arising primarily out of or resulting primarily from, the operation of or conduct of the [Performance Chemicals] Business at any time." This indemnification is uncapped and does not have a survival period.³³

³² See, e.g., Cyrus Sanati, *How DuPont Spinoff Chemours Came Back from the Brink*, Fortune, <https://fortune.com/2016/05/18/how-dupont-spinoff-chemours-came-back-from-the-brink/> (May 18, 2016) (accessed January 10, 2020).

³³ See Separation Agreement, *supra* n. 44, p 11.

166. The Chemours Company agreed to indemnify Historical DuPont against and assume for itself the Performance Chemical Business’s liabilities regardless of: (a) when or where such liabilities arose; (b) whether the facts upon which they are based occurred prior to, on, or subsequent to the effective date of the spinoff; (c) where or against whom such liabilities are asserted or determined; (d) whether arising from or alleged to arise from negligence, gross negligence, recklessness, violation of law, fraud or misrepresentation by any member of the Historical DuPont group or the Chemours group; and (e) which entity is named in any action associated with any liability.³⁴

167. The Chemours Company agreed to indemnify Historical DuPont from, and assume all, environmental liabilities that arose prior to the spinoff if they were “primarily associated” with the Performance Chemicals Business.³⁵ Such liabilities were deemed “primarily associated” if Historical DuPont reasonably determined that 50.1% of the liabilities were attributable to the Performance Chemicals Business.³⁶

168. The Chemours Company also agreed to use its best efforts to be fully substituted for Historical DuPont with respect to “any order, decree, judgment, agreement or Action with respect to Chemours Assumed Environmental Liabilities”³⁷

³⁴ *Id.* at 53–65 (Article VI—Indemnification).

³⁵ *Id.* at 7, 53–65 (Article VI—Indemnification).

³⁶ *Id.*

³⁷ *Id.* at 63.

169. At the time of the July 2015 spin-off, Historical DuPont was well aware of its potential liabilities related to PFAS contamination throughout the United States.

170. Until the spinoff was complete, The Chemours Company was a wholly-owned subsidiary of Historical DuPont. Although The Chemours Company had a separate board, the board was controlled by Historical DuPont employees.

171. Once the spinoff was complete, seven new members of The Chemours Company board were appointed, for an eight-member board of directors of the new public company. The negotiations concerning the spinoff were conducted and the related decisions were made while the board was still controlled by Historical DuPont.

172. The new independent board appointed upon the completion of the spinoff did not take part in the negotiations of the terms of the separation.

173. In 2005, Historical DuPont agreed to pay \$16.5 million to resolve eight counts brought by the EPA alleging violations of the Toxic Substances Control Act and the Resource Conservation and Recovery Act concerning the toxicity of PFAS.³⁸ At the time, it was the largest such penalty in history.³⁹

³⁸ See U.S. EPA, *Reference News Release: EPA Settles PFOA Case Against DuPont for Largest Environmental Administrative Penalty in Agency History*, <https://www.epa.gov/enforcement/reference-news-release-epa-settles-pfoa-case-against-dupont-largest-environmental> (December 14, 2005) (accessed January 10, 2020).

³⁹ *Id.*

174. Also in 2005, Historical DuPont settled a class action lawsuit filed on behalf of 70,000 residents of Ohio and West Virginia for \$343 million.⁴⁰ Under the terms of the 2005 class action settlement, Historical DuPont agreed to fund a panel of scientists to determine if any diseases were linked to PFOA exposure, to filter local water for as long as C-8 (*i.e.*, long-chain PFAS) concentrations exceeded regulatory thresholds, and to set aside \$235 million for ongoing medical monitoring of the affected community.⁴¹ This panel was known as the C-8 Science Panel and is discussed above and herein.

175. After eight years, the C-8 Science Panel found several significant diseases, including cancer, with a probable link to PFOA.⁴²

176. Thereafter, more than 3,500 personal injury claims were filed in Ohio and West Virginia as part of the 2005 settlement that were consolidated into a multidistrict litigation court in Ohio (the Ohio MDL).⁴³

177. As The Chemours Company explained in its November 2016 SEC filing: “[s]ignificant unfavorable outcomes in a number of cases in the [Ohio] MDL

⁴⁰ See Settlement Agreement in *Leach v. E.I DuPont de Nemours and Company*, In the Circuit Court of Wood County, West Virginia, Case No. 01-C-608.

⁴¹ *Id.*

⁴² See *C8 Probable Link Reports*, *supra* n. 42.

⁴³ See *In re: E.I. du Pont de Nemours and Company C-8 Personal Injury Litigation*, Case No. 1-13-MD-2433.

could have a material adverse effect on Chemours consolidated financial position, results of operations or liquidity.”⁴⁴

178. Juries in three bellwether trials returned multimillion-dollar verdicts against Historical DuPont, awarding compensatory damages and, in two cases, punitive damages to plaintiffs who claimed that PFOA exposure caused their illnesses.⁴⁵

179. On February 13, 2017, Historical DuPont and The Chemours Company agreed to pay \$671 million to resolve the Ohio MDL.⁴⁶

180. The Chemours Company also agreed to pay \$25 million for future PFOA costs not covered by the settlement for each of the next five years (up to an additional \$125 million).⁴⁷

⁴⁴ See The Chemours Company SEC Form 10-Q Quarterly Report, p 22 <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001627223/595eddb7-8814-4221-a013-d8e5c2fabea3.pdf> (November 2016) (accessed January 10, 2020).

⁴⁵ See Erica Teichert, *Jury orders DuPont to pay \$10.5 million over leaked chemical*, Reuters, <https://www.reuters.com/article/us-du-pont-verdict/jury-orders-dupont-to-pay-10-5-million-over-leaked-chemical-idUSKBN14P1VD> (January 5, 2017) (accessed January 10, 2020).

⁴⁶ Kris Maher and Cameron McWhirter, *DuPont Settlement of Chemical Exposure Case Seen as “Shot in the Arm” for Other Suits*, The Wall Street Journal, <https://www.wsj.com/articles/dupont-chemours-settle-teflon-chemical-exposure-case-for-671-million-1486987602> (February 13, 2017) (accessed January 10, 2020).

⁴⁷ See DowDupont Inc. SEC Form 10-Q Quarterly Report, p 43, <https://www.sec.gov/Archives/edgar/data/1666700/000166670017000026/dowdupont3q17093017.htm> (for the period ending September 30, 2017) (accessed November 1, 2019).

181. Historical DuPont also agreed to cover additional amounts up to \$25 million for five years.⁴⁸

182. At the time of the transfer of its Performance Chemicals Business to The Chemours Company, Historical DuPont had been sued, threatened with suit, and/or had knowledge of the likelihood of litigation to be filed regarding Historical DuPont's liability for damages and injuries from the manufacture of PFAS and products that contain PFAS.

183. The Chemours Company also assumed the obligation to clean-up Pompton Lakes, New Jersey, where Historical DuPont manufactured explosives from 1902 to 1994, and where lead salts, mercury, volatile organic compounds, explosive powders, chlorinated solvents, and detonated blasting caps still contaminate groundwater and soil. The Chemours Company's SEC filings estimate that the remediation, which began in 1985, may cost as much as \$119 million to complete.⁴⁹

184. Creating The Chemours Company and engaging in the above-described corporate machinations was an attempt to segregate a large portion of Historical DuPont's environmental liabilities, including liabilities related to its PFAS.

185. Through the consolidation of Historical DuPont's performance chemical liabilities, DuPont has attempt to limit the availability of funds arising out of—and necessary to pay damages for—that DuPont's liability.

⁴⁸ *Id.*

⁴⁹ *Id.* at 23.

V. The ongoing federal investigation of PFAS.

186. After being alerted to the potential environmental and health dangers created by PFAS, the U.S. EPA listed certain PFAS for formal evaluation under the Safe Drinking Water Act (SDWA) to determine whether the enactment of regulations may be warranted.

187. Six PFAS specific compounds (PFOA, PFOS, PFBS, PFHxS, PFHpA, and PFNA) were among the list of contaminants monitored during the U.S. EPA's third Unregulated Contaminant Monitoring Rule study (UCMR3).

188. Monitoring of these substances was required during UCMR3 from 2012 to 2015 to provide a basis for future regulatory action to protect public health.⁵⁰

189. Two types of water supplies were monitored throughout the United States during UCMR3: (a) large public water supplies serving more than 10,000 people, and (b) small public water supplies serving less than 10,000 people.

190. A total of just 4,064 large public water supplies and 800 small public water supplies throughout the United States were monitored during the UCMR3 study.

191. The total number of small public water supplies in the United States is approximately 144,165, and only about 0.5% (800) of these public water supplies were included in the UCMR3 study.

⁵⁰ See, e.g., Michigan Department of Environment, Great Lakes, and Energy, *2018 PFAS Sampling of Drinking Water Supplies in Michigan*, p 1. https://www.michigan.gov/documents/pfasresponse/2018_PFAS_Sampling_of_Drinking_Water_Supplies_in_Michigan_663543_7.pdf (July 26, 2019) (accessed January 10, 2020).

192. The majority of small public water supplies in the United States, including in Michigan, were not sampled during the UCMR3 sampling by EPA that took place between 2012 and 2015.⁵¹

193. The UCMR3 used the U.S. EPA 537 method, which, at that time was only capable of reporting concentrations between 10 parts per trillion (ppt) (0.01 ug/l) or greater for PFHpA and 90 ppt (0.09 ug/l) or greater for PFBS.

194. Two large CWS from Ann Arbor and Plainfield Township were identified as containing PFOS concentrations of 43 ppt and 60 ppt, respectively.⁵²

195. PFAS have been formally identified as “emerging contaminants” by the U.S. EPA.

196. The term “emerging contaminants” describes contaminants about which the scientific community, regulatory agencies, and the public have an evolving awareness regarding their movements in the environment and effects on public health.

197. PFAS, like other emerging contaminants, are the focus of active research and study, which means new information is released periodically regarding the effects on the environment and human health as a result of exposure to the chemicals.

⁵¹ *Id.* at 2.

⁵² *Id.* at 3.

198. The U.S. EPA sets the Maximum Contaminant Level (MCL) standard for drinking water quality. An MCL is the legal threshold limit on the amount of a substance that is allowed in CWS under the SDWA.

199. The U.S. EPA is currently evaluating PFAS to set MCLs under the process required by the SDWA.

200. In the absence of an MCL, the U.S. EPA develops health advisories to provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water.

201. The U.S. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

202. To provide consumers, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, in May 2016, the U.S. EPA, Office of Water, established a Lifetime Health Advisory (LHA) level of 70 ppt or 0.07 micrograms per liter ($\mu\text{g}/\text{L}$).

203. In addition, the U.S. EPA, in issuing its 2016 LHA, directed that when both PFOA and PFOS are found in drinking water, the *combined* concentrations of PFOA and PFOS should be compared with the 70 ppt LHA.

204. The U.S. EPA further recommends that the LHA for PFOA of 70 ppt (0.07 $\mu\text{g}/\text{L}$) apply to both short-term scenarios during pregnancy and lactation, as well as to lifetime-exposure scenarios.

205. The U.S. EPA has not yet established LHAs for other PFAS.

206. At least four states—Vermont, California, Minnesota, and New Jersey—have adopted limits or health guidelines on PFAS in drinking water that are lower than the current U.S. EPA LHAs.

207. In 2016, the Agency for Toxic Substances and Disease Registry (ATSDR) released an updated Toxicological Profile for PFAS that revised its minimal risk levels (MRLs) for PFOA and PFOS.

208. An MRL is the estimated amount of a chemical a person can eat, drink, or breathe each day without a detectable risk to health.

209. The intermediate oral (15 to 364 days) MRL for PFOA was revised from the previous level of 2×10^{-5} (0.00002) mg/kg/day to 3×10^{-6} (0.000003) mg/kg/day, and for PFOS was revised from the previous level of 3×10^{-5} (0.00003) mg/kg/day to 2×10^{-6} (0.000002) mg/kg/day.

210. These new MRLs were lowered to take into consideration immune system effects; the former thresholds were based only on developmental health effects.

VI. Michigan's investigation of the PFAS crisis and its response.

211. Michigan is one of the most industrialized states in the United States, with a legacy of substantial heavy industrial manufacturing, including auto

manufacturing and supporting industries, carpet and fabric coating, leather tanneries, and paper mills.⁵³

212. Defendants sold PFAS into Michigan for use in industrial processes.

213. Products containing PFAS made by Defendants were sold into the State of Michigan.

214. Defendants also used PFAS in manufacturing processes and waste management practices throughout Michigan.

215. Examples of industries using PFAS manufactured by Defendants include, but are not limited to: automotive and supporting industries, aviation, aerospace and defense, biocides, cable and wiring, construction, electronics, energy, food processing, household products, oil and mining production, medical articles, paper and packaging, semiconductors, textiles, leather goods, and apparel.

216. PFAS contamination in Michigan's drinking water and natural resources is a serious, immediate, and direct threat to the health, safety, and well-being of Michigan residents and to the State's natural resources.

217. In response to this serious and immediate threat, Michigan has implemented one of the most aggressive PFAS sampling plans in the nation.⁵⁴

⁵³ Western Michigan University White Paper, *A National PFAS Roadmap*, p 4 <https://docs.house.gov/meetings/IF/IF18/20190515/109746/HHRG-116-IF18-20190515-SD011.pdf> (May 15, 2019) (accessed January 10, 2020).

⁵⁴ *Id.*

218. In November 2017, then-Governor of Michigan Rick Snyder issued Executive Directive No. 2017-4 to address concerns about PFAS contamination in Michigan.⁵⁵

219. Executive Directive No. 2017-4 established MPART (see Paragraph 10, above), which was instructed to reach out to several governmental bodies to request information about and coordinate on PFAS issues and formulated an action plan to address PFAS contamination in the State.

220. MPART would be staffed—and is staffed—with employees of the Executive Office of the Governor and each affected department.

221. On February 4, 2019, recognizing MPART’s work to date, Governor Gretchen Whitmer signed Executive Order 2019-3, establishing MPART as an enduring body to continue to address the PFAS contamination in Michigan, protect public health, and ensure the safety of Michigan’s land, air, and water, while facilitating inter-agency coordination, increasing transparency, and requiring clear standards to ensure accountability.⁵⁶

222. MPART is comprised of numerous state governmental entities: the Department of Environment, Great Lakes, and Energy (EGLE) (f/k/a Michigan

⁵⁵ See generally Executive Directive No. 2017-4, https://www.michigan.gov/documents/snyder/ED_2017-4_605925_7.pdf (November 13, 2017) (accessed January 10, 2020).

⁵⁶ See generally Executive Directive No. 2019-3, https://www.michigan.gov/whitmer/0,9309,7-387-90499_90705-488737--,00.html; see also Department of Environment, Great Lakes, and Energy, Michigan PFAS Action Response Team, *MPART*, <https://www.michigan.gov/pfasresponse/0,9038,7-365-86513--,00.html> (accessed January 10, 2020).

Department of Environmental Quality (MDEQ)), the Department of Health and Human Services, the Department of Agriculture and Rural Development, the Department of Natural Resources, the Department of Transportation, the Department of Licensing and Regulatory Affairs, and the Department of Military and Veterans Affairs.⁵⁷

A. Michigan's PFAS standards.

223. EGLE established generic residential cleanup criteria under Part 201 of the NREPA for groundwater used as drinking water for PFOA and PFOS in January 2018 under the authority of Mich. Admin. Code R 299.6.

224. MPART was tasked with forming an Independent Science Advisory Panel, comprised of experts from throughout the United States, to provide analysis of human health risks associated with PFAS in the environment and evidence-based recommendations to Michigan.

225. On December 7, 2018, the Independent Science Advisory Panel published a report which, amongst other things, advised that the State of Michigan should impose drinking water standards for PFOS and PFOA that are more restrictive than the U.S. EPA's LHA of 70 ppt combined for PFOS and PFOA and that the State of Michigan should evaluate other PFAS.⁵⁸

⁵⁷ *Id.*

⁵⁸ Michigan PFAS Science Advisory Panel, *Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan* (December 7, 2018), available at https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf (last accessed January 10, 2020).

226. In March 2019, Governor Gretchen Whitmer announced that Michigan will establish enforceable state drinking water standards for PFAS.⁵⁹

227. Drinking water standards have traditionally been established by the U.S. EPA as MCLs under the SDWA.⁶⁰

228. The U.S. EPA, however, has not initiated its process for establishing PFAS MCLs, and Michigan will not wait for federal action while its natural resources continue to become contaminated and its residents are placed at further risk.⁶¹

229. Governor Whitmer directed MPART to form an independent Science Advisory Workgroup to navigate the science and standards from across the country and develop health-based values (HBVs) to inform the initial phase of the rulemaking process for establishing state drinking water standards.⁶²

230. The Science Advisory Workgroup undertook a methodical approach to evaluate existing and proposed standards from across the country for the 18 PFAS analytes considered under U.S. EPA Method 537.1.⁶³

⁵⁹ *Health-Based Drinking Water Value Recommendations for PFAS in Michigan*, n.1, *supra*, p 2.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.* at 3; see also *Method 537.1: Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)* https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=343042&Lab=NERL (accessed January 10, 2020).

231. The Science Advisory Workgroup focused on those PFAS that they determined had enough peer reviewed studies on which to base their conclusions.⁶⁴

232. On June 27, 2019, the Science Advisory Workgroup published its findings and recommended the following Drinking Water Health-Based Values for seven of the studied PFAS:⁶⁵

Specific PFAS	Drinking Water Health-based Value	Chemical Abstract Services Registry Number (CASRN)
PFNA	6 ng/L (ppt)	375-95-1
PFOA	8 ng/L (ppt)	335-67-1
PFHxA	400,000 ng/L (ppt)	307-24-4
PFOS	16 ng/L (ppt)	1763-23-1
PFHxS	51 ng/L (ppt)	355-46-4
PFBS	420 ng/L (ppt)	375-73-5
HFPO-DA (GenX)	370 ng/L (ppt)	13252-13-6

233. Michigan has moved forward with rulemaking that establish these values as enforceable drinking water standards (Maximum Contaminant Levels or MCL) for PFAS.⁶⁶

⁶⁴ *Health-Based Drinking Water Value Recommendations for PFAS in Michigan*, *supra*, p 3.

⁶⁵ *Id.*

⁶⁶ *Michigan moves forward on drinking water standards for PFAS* (October 11, 2019), available at <https://www.michigan.gov/som/0,4669,7-192-47796-509830--,00.html>.

234. Based on the similarity in toxicity for the long-chain PFAS, the Science Advisory Workgroup recommended use of the HBV for PFNA (6 ng/L [ppt]) as a screening level for all other long-chain PFAS including NEtFOSAA (CASRN: 2991-50-6); NMeFOSAA (CASRN: 2355-31-9); PFDA (CASRN: 335-76-2); PFDoA (CASRN: 307-55-1); PFTA (CASRN: 376-06-7); PFTrDA (CASRN: 72629-94-8); and PFUnA (CASRN: 2058-94-8).⁶⁷ Study of these long-chain PFAS is ongoing.

235. Rule 323.1057 (Rule 57) of Michigan's Part 4 Water Quality Standards sets forth procedures for calculating water quality standards (WQS or Michigan Rule 57 Values) to protect humans, wildlife, and aquatic life. EGLE calculates these standards.

236. WQS are used to assess point source discharges into surface waters and apply to all surface waters in Michigan unless site-specific values have been derived.⁶⁸

237. Michigan has WQS for PFOS of 12 ppt for surface waters that are not used for drinking water and 11 ppt for those used as a drinking water source.⁶⁹

238. Michigan has WQS for PFOA of 12,000 ppt for surface waters that are not used for drinking water and 420 ppt for those used as a drinking water source.⁷⁰

⁶⁷ *Health-Based Drinking Water Value Recommendations for PFAS in Michigan*, *supra*, p 3.

⁶⁸ E.G.L.E., *Rule 57 Water Values*, https://www.michigan.gov/egle/0,9429,7-135-3313_3681_3686_3728-11383--,00.html (accessed January 10, 2020).

⁶⁹ Michigan PFAS Action Response Team, *Wastewater Treatment Plants/Industrial Pretreatment Program*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86510_88079-476131--,00.html (accessed January 10, 2020).

⁷⁰ *Id.*

B. MPART's PFAS investigations.

239. Immediately after its formation, MPART began a series of investigations and collected sampling data to identify, characterize, and address risks to public health and State natural resources as quickly as possible.⁷¹

240. MPART initiated a Statewide PFAS Sampling Program in 2018, which consists of multiple phases.

241. MPART began Phase I of its Statewide PFAS Sampling Program (MPART Study Phase I) in April 2018 in order to test drinking water for approximately 75% of Michigan's residents.⁷²

242. MPART conducted Phase II of MPART's Statewide PFAS Sampling Program (MPART Study Phase II) in 2019 to sample non-community public water supplies which were not part of Phase I in order to assess the potential for PFAS impact in drinking water for expanded at-risk populations.⁷³

243. A total of 2,500 facilities, including both CWS and non-community water supplies (NCWS), were sampled during the MPART Study Phase I and Phase II.

⁷¹ See, e.g., Department of Environment, Great Lakes, and Energy, Michigan PFAS Action Response Team, *PFAS Sites Being Investigated*, <https://www.michigan.gov/pfasresponse/0,9038,7-365-86511---,00.html> (accessed January 10, 2020).

⁷² Michigan PFAS Action Response Team, *PFAS Response, Phase I (2018)*, available at <https://www.michigan.gov/pfasresponse/0,9038,7-365--495899--,00.html> (accessed January 10, 2020).

⁷³ Michigan PFAS Action Response Team, *PFAS Response, Phase II (2019)*, available at https://www.michigan.gov/pfasresponse/0,9038,7-365-86510_88061_92549_92526-495786--,00.html (accessed January 10, 2020).

244. A total of 70 CWS with intakes in one of the Great Lakes, connecting channels, or inland rivers, and 1,045 other CWS that rely solely on groundwater were sampled.

245. The CWS facilities sampled consisted of municipalities, manufactured housing communities, apartment complexes, subdivisions, condominium developments, and others.

246. A total of 460 schools, 165 childcare providers and Michigan Head Start programs, and approximately 716 additional supplies classified as NCWS, which have their own groundwater well(s), were also sampled.

247. In addition to MPART Study Phase I and Phase II, MPART has also conducted a 74-site groundwater investigation, surface water screening, fish and wildlife screening, and screening of surface water foam suspected to be the result of PFAS contamination.

248. MPART's widespread sampling conducted pursuant to Executive Directive 2017-4 and Executive Order 2019-3 has revealed the presence of PFAS at levels that threaten significant portions of the State's ecosystem.

249. To date, the Statewide PFAS Sampling Program has resulted in identification and discovery of numerous locations where one or more of the following was detected: (a) Groundwater sampling greater than or equal to 70 ppt of PFOS and PFOA (*i.e.*, exceeding EGLE's Part 201 cleanup criteria); (b) Drinking Water sampling greater than or equal to 70 ppt of PFOS and PFOA (*i.e.*, exceeding

the U.S. EPA's LHA); and/or (c) Surface Water sampling greater than or equal to 12 ppt of PFOS and 12,000 ppt of PFOA (*i.e.*, exceeding Michigan Rule 57 Values).

250. The State's investigation and response are ongoing given the scope of the problem and that knowledge of PFAS's public health and environmental risks is evolving.

C. PFAS contamination in Michigan.

251. MPART has discovered elevated PFAS concentrations in lakes and waterways including, but not limited to, Rogue River, Thornapple River, and Huron River.⁷⁴

252. PFAS-contaminated foam has been documented on the surface of rivers and lakes detrimentally affected by PFAS contamination in Michigan.

253. Since June 2019, health advisories have been issued by local health departments or the Michigan Department of Health and Human Services warning residents to avoid contact with PFAS foam on various lakes and streams in Michigan, including but not limited to the Huron River in Southeast Michigan.

254. These advisories which are in place indefinitely, advise residents to avoid ingesting PFAS foam and to wash their hands after touching foam.

⁷⁴ Michigan PFAS Action Response Team, *PFAS Foam on Lakes and Streams* (June 5, 2019), available at https://www.michigan.gov/pfasresponse/0,9038,7-365-88059_91295---,00.html (accessed January 10, 2020).

255. Human health-based consumption advisories have been established for fish in various lakes and streams in Michigan, including but not limited to water bodies in the Huron River Watershed, based on the presence of PFAS in edible portions of fish.

256. These advisories range from limitations on consumption to “do not eat” advisories, and such advisories remain in effect at this time.

257. MPART has also discovered elevated levels of PFAS in groundwater and surface water, *including drinking water sources*.

258. MPART has published a list of sites where contamination has been detected based on one or more of the following standards: (a) Groundwater sampling greater than or equal to 70 ppt of PFOS and PFOA (*i.e.*, exceeding EGLE’s Part 201 cleanup criteria); (b) Drinking Water sampling greater than or equal to 70 ppt of PFOS and PFOA (*i.e.*, exceeding the U.S. EPA’s LHA); and/or (c) Surface Water sampling greater than or equal to 12 ppt of PFOS and 12,000 ppt of PFOA (*i.e.*, exceeding Michigan Rule 57 Values).

259. These sites include, but are not limited to, the following sites (“PFAS Sites”).

1. Alpena Hide and Leather, Alpena, Alpena County.⁷⁵

260. The Alpena Hide and Leather site is located at and around a former tannery.

261. PFAS testing at the Alpena Hide and Leather site has detected 97 Monitoring Well samples greater than 70 ppt of PFOS and PFOA.

262. PFAS testing at the Alpena Hide and Leather site has also detected: (a) 87 Monitoring Well samples between Non-Detection and 70 ppt of PFOS and PFOA; and (b) ten Surface Water samples between Non-Detection and 12 ppt of PFOS and 12,000 ppt of PFOA.

263. Other PFAS analytes have been detected in samples at the Alpena Hide and Leather site.

2. Manistee Plating, Manistee, Manistee County.⁷⁶

264. The Manistee Plating site is located at and around a former plating facility.

265. PFAS testing at the Manistee Plating site has detected eighteen Groundwater samples greater than 70 ppt of PFOS and PFOA.

266. PFAS testing at the Manistee Plating site has also detected twelve Groundwater samples between Non-Detection and 70 ppt of PFOS and PFOA.

⁷⁵ Michigan PFAS Action Response Team, *Alpena Hide and Leather, Alpena, Alpena County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-452810-,00.html (updated November 13, 2019) (accessed January 10, 2020).

⁷⁶ Michigan PFAS Action Response Team, *Manistee Plating, Manistee, Manistee County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-481133-,00.html (updated December 26, 2019) (accessed Jan. 10, 2020).

267. Other PFAS analytes have been detected in samples at the Manistee Plating site.

3. Ithaca Sanitary Landfill, Ithaca, Gratiot County.⁷⁷

268. The Ithaca Sanitary Landfill site is located at and around a former landfill.

269. PFAS testing at the Ithaca Sanitary Landfill site has detected: (a) four Groundwater samples greater than or equal to 70 ppt PFOS and PFOA; and (b) two Surface Water samples greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA.

270. PFAS testing at the Ithaca Sanitary Landfill site has also detected three Groundwater samples between Non-Detection and 70 ppt PFOS+PFOA.

271. Other PFAS analytes have been detected in samples at the Ithaca Sanitary Landfill site.

4. Muskegon County Landfill Type II, Ravenna, Muskegon County.⁷⁸

272. The Muskegon County Landfill site is located at and around an active Type II municipal landfill.

⁷⁷ Michigan PFAS Action Response Team, *Ithaca Sanitary Landfill, Ithaca, Gratiot County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-482361-,00.html (updated December 11, 2019) (accessed January 10, 2020).

⁷⁸ Michigan PFAS Action Response Team, *Muskegon County Landfill Type II, Ravenna, Muskegon County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-508257-,00.html (updated December 11, 2019) (accessed January 10, 2020).

273. PFAS testing at the Muskegon County Landfill site has detected two Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

274. PFAS testing at the Muskegon County Landfill site has also detected: (a) two Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) one Non-Potable Supply Well samples between Non-Detection and 70 ppt PFOS and PFOA.

275. Other PFAS analytes have been detected in samples at the Muskegon County Landfill site.

5. MAHLE Engine Components, USA, Inc.—Former Harvey Street Muskegon Plant, Muskegon, Muskegon County.⁷⁹

276. The MAHLE Engine Components site is located at and around a former engine component manufacturing and plating operations facility.

277. PFAS testing at the MAHLE Engine Components site has detected fifteen Monitoring Well samples greater than or equal to 70 ppt PFOS and PFOA.

278. PFAS testing at the MAHLE Engine Components site has also detected: (a) 20 Monitoring Well samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) three Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

⁷⁹ Michigan PFAS Action Response Team, *MAHLE Engine Components, USA, Inc. - Former Harvey Street Muskegon Plant, Muskegon, Muskegon County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-490718--,00.html (updated December 11, 2019) (accessed January 10, 2020).

279. Other PFAS analytes have been detected in samples at the MAHLE Engine Components site.

6. Peerless Plating, Muskegon Heights, Muskegon County.⁸⁰

280. The Peerless Plating site is located at and around an abandoned electroplating facility.

281. PFAS testing at the Peerless Plating site has detected two Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

282. PFAS testing at the Peerless Plating site has also detected seventeen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

283. Other PFAS analytes have been detected in samples at the Peerless Plating site.

7. Pitsch Sanitary Landfill, Belding, Ionia County.⁸¹

284. The Pitsch Sanitary Landfill site is located at and around an active type II municipal landfill.

285. PFAS testing at the Pitsch Sanitary Landfill site has detected one Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

⁸⁰ Michigan PFAS Action Response Team, *Peerless Plating, Muskegon Heights, Muskegon County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-497626--,00.html (updated November 19, 2019) (accessed January 10, 2020).

⁸¹ Michigan PFAS Action Response Team, *Pitsch Sanitary Landfill, Belding, Ionia County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-509558--,00.html (updated December 11, 2019) (accessed January 10, 2020).

286. PFAS testing at the Pitsch Sanitary Landfill site has also detected: (a) four Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) one Non-Potable Supply Well sample between Non-Detection and 70 ppt PFOS and PFOA.

287. Other PFAS analytes have been detected in samples at the Pitsch Sanitary Landfill site.

8. Ashley Avenue Disposal Area, Grattan Township, Kent County.⁸²

288. The Ashley Avenue Disposal Area site is located at and around a dumping site in Grattan Township, but with a Belding mailing address.

289. In 2018, EGLE received a complaint from a resident who stated hundreds of thousands of gallons of industrial waste, including plating wastes, were discharged directly on the ground surface at three separate areas on the site.

290. PFAS testing at the Ashley Avenue Disposal Area site has detected one Groundwater sample greater than or equal to 70 ppt PFOS and PFOA.

291. PFAS testing at the Ashley Avenue Disposal Area site has also detected five Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

⁸² Michigan PFAS Action Response Team, *Ashley Avenue Disposal Area, Grattan Township, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-499524--,00.html (updated November 13, 2019) (accessed January 10, 2020).

292. Other PFAS analytes have been detected in samples at the Ashley Avenue Disposal Area site.

9. BASF Corporation—Inmont Division, Wyoming, Kent County.⁸³

293. The BASF Corporation site is located at and around former furniture varnish, paint, and container coatings facilities.

294. PFAS testing at the BASF Corporation site has detected three Groundwater Effluent samples greater than or equal to 70 ppt PFOS and PFOA.

295. Other PFAS analytes have been detected in samples at the BASF Corporation site.

10. Lacks Industries—Cascade, Grand Rapids, Kent County.⁸⁴

296. The Lacks Industries site is located at and around a former metal plating facility and plastic production facility.

297. PFAS testing at the Lacks Industries site has detected 26 Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

⁸³ Michigan PFAS Action Response Team, *BASF Corporation—Inmont Division, Wyoming, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-500861--,00.html (updated November 14, 2019) (accessed January 10, 2020).

⁸⁴ Michigan PFAS Action Response Team, *Lacks Industries—Cascade, Grand Rapids, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-452843--,00.html (updated November 13, 2019) (accessed January 10, 2020).

298. PFAS testing at the Lacks Industries site has also detected: (a) ten Drinking Water (Residential Well) samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) 20 Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

299. Other PFAS analytes have been detected in samples at the Lacks Industries site.

11. Electro Chemical Finishing—Remico, Wyoming, Kent County.⁸⁵

300. Electro Chemical Finishing site is located at and around a chemical facility.

301. PFAS testing at the Electro Chemical Finishing site has detected ten Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

302. PFAS testing at the Electro Chemical Finishing site has also detected three Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

303. Other PFAS analytes have been detected in samples at the Electro Chemical Finishing site.

⁸⁵ Michigan PFAS Action Response Team, *Electro Chemical Finishing—Remico, Wyoming, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-497627--,00.html (updated December 11, 2019) (accessed January 10, 2020).

12. North 34th Street, Richland Township, Kalamazoo County.⁸⁶

304. The North 34th Street site is located at and around a former plastic manufacturing facility.

305. PFAS testing at the North 34th Street site has detected: (a) sixteen Drinking Water (Residential) samples greater than or equal to 70 ppt PFOS and PFOA; (b) 49 Monitoring Well samples greater than or equal to 70 ppt PFOS and PFOA; (c) ten Surface Water samples greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA; (d) three Extraction Well samples greater than or equal to 70 ppt PFOS and PFOA; and (e) one Effluent (Pumping Station) sample greater than or equal to 70 ppt PFOS and PFOA.

306. PFAS testing at the North 34th Street site has also detected: (a) 26 Drinking Water (Residential) samples between Non-Detection and 70 ppt PFOS and PFOA; (b) eleven Monitoring Well samples between Non-Detection and 70 ppt PFOS and PFOA; (c) two Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA; and (d) one Effluent (Pumping Station) sample between Non-Detection and 70 ppt PFOS and PFOA.

307. Other PFAS analytes have been detected in samples at the North 34th Street site.

⁸⁶ Michigan PFAS Action Response Team, *North 34th Street, Richland Township, Kalamazoo County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-473485--,00.html (updated November 13, 2019) (accessed January 10, 2020).

13. Crown Vantage Property, Parchment, Kalamazoo County.⁸⁷

308. The Crown Vantage Property is located at and around a former Type II and III landfill, a historic wastewater treatment plant, former settling lagoons, and a former mill property.

309. PFAS testing at the Crown Vantage Property site has detected 27 Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

310. PFAS testing at the Crown Vantage Property site has also detected fifteen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

311. Other PFAS analytes have been detected in samples at the Crown Vantage Property site.

14. Nolichucky Industrial Corp., Kalamazoo, Kalamazoo County.⁸⁸

312. The Nolichucky Industrial Corp. site is located at and around a former paper manufacturing facility.

313. PFAS testing at the Nolichucky Industrial Corp. site has detected ten Groundwater samples greater than or equal to 70 ppt PFOS and PFOA;

⁸⁷ Michigan PFAS Action Response Team, *Crown Vantage Property, Parchment, Kalamazoo County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-479889--,00.html (updated November 13, 2019) (accessed January 10, 2020).

⁸⁸ Michigan PFAS Action Response Team, *Nolichucky Industrial Corp., Kalamazoo, Kalamazoo County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-498496--,00.html (updated December 11, 2019) (accessed January 10, 2020).

314. PFAS testing at the Nolichucky Industrial Corp. site has also detected: (a) 33 Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) two Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

315. Other PFAS analytes have been detected in samples at the Nolichucky Industrial Corp. site.

15. Du-Wel Metals, Hartford, Van Buren County.⁸⁹

316. The Du-Wel Metals site is located at and around a former manufacturing facility.

317. PFAS testing at the Du-Wel Metals site has detected: (a) thirteen Groundwater samples greater than or equal to 70 ppt PFOS and PFOA; and (b) eleven Residential Well samples greater than or equal to 70 ppt PFOS and PFOA.

318. PFAS testing at the Du-Wel Metals site has also detected: (a) four Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) 35 Residential Well samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

319. Other PFAS analytes have been detected in samples at the Du-Wel Metals site.

⁸⁹ Michigan PFAS Action Response Team, *Du-Wel Metals, Hartford, Van Buren County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95600_95632-500862--,00.html (updated September 13, 2019) (accessed January 10, 2020).

16. Lear Siegler Inc., Mendon, St. Joseph County.⁹⁰

320. The Lear Siegler Inc. site is located at and around a former automotive accessory manufacturer facility.

321. PFAS testing at the Lear Siegler Inc. site has detected nine Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

322. PFAS testing at the Lear Siegler Inc. site has also detected three Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

323. Other PFAS analytes have been detected in samples at the Lear Siegler Inc. site.

17. RACER Plants 2, 3, & 6, Lansing, Ingham County.⁹¹

324. RACER Plants 2, 3, & 6 sites are located at and around former automotive manufacturing facilities.

325. PFAS testing at RACER Plants 2, 3, & 6 sites have detected: (a) 53 Groundwater samples greater than or equal to 70 ppt PFOS and PFOA; and (b) 90 Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

326. Other PFAS analytes have been detected in samples at the RACER Plants sites.

⁹⁰ Michigan PFAS Action Response Team, *Lear Siegler Inc., Mendon, St. Joseph County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-499528-,00.html (updated December 19, 2019) (accessed January 10, 2020).

⁹¹ Michigan PFAS Action Response Team, *RACER Plants 2, 3, 6, Lansing, Ingham County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-452826-,00.html (updated November 13, 2019) (accessed January 13, 2020).

18. Michner Plating, Jackson, Jackson County.⁹²

327. The Michner Plating site is located at and around a former plating facility that operated from the 1930s until 2007.

328. PFAS testing at the Michner Plating site has detected 28 Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

329. Other PFAS analytes have been detected in samples at the Michner Plating site.

19. Richfield Landfill, Davison, Genesee County.⁹³

330. The Richfield Landfill site is located at and around a former landfill.

331. PFAS testing at the Richfield Landfill site has detected one Groundwater sample greater than or equal to 70 ppt PFOS and PFOA.

332. PFAS testing at the Richfield Landfill site has also detected one Groundwater sample between Non-Detection and 70 ppt PFOS and PFOA.

333. Other PFAS analytes have been detected in samples at the Richfield Landfill site.

• ⁹² Michigan PFAS Action Response Team, *Michner Plating, Jackson, Jackson County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-485521--,00.html (updated December 11, 2019) (accessed January 13, 2020).

⁹³ Michigan PFAS Action Response Team, *Richfield Landfill, Davison, Genesee County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-477577--,00.html (updated December 11, 2019) (accessed January 10, 2020).

20. Coldwater Road Landfill, Flint, Genesee County.⁹⁴

334. The Coldwater Road Landfill site is located at and around an active landfill.

335. PFAS testing at the Coldwater Road Landfill site has detected: (a) one Drinking Water (Residential) sample greater than or equal to 70 ppt PFOS and PFOA; (b) 26 Groundwater samples greater than or equal to 70 ppt PFOS and PFOA; and (c) sixteen Surface Water samples greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA.

336. PFAS testing at the Coldwater Road Landfill site has also detected: (a) two Drinking Water (Residential) samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) fifteen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

337. Other PFAS analytes have been detected in samples at the Coldwater Road Landfill site.

21. Lapeer Plating & Plastics, Lapeer, Lapeer County.⁹⁵

338. The Lapeer Plating & Plastics site is located at and around a chrome plating facility.

⁹⁴ Michigan PFAS Action Response Team, *Coldwater Road Landfill, Flint, Genesee County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-452819-,00.html (updated December 11, 2019) (accessed January 10, 2020).

⁹⁵ Michigan PFAS Action Response Team, *Lapeer Plating & Plastics, Lapeer, Lapeer County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-452827-,00.html (updated December 11, 2019) (accessed January 10, 2020).

339. PFAS testing at the Lapeer Plating & Plastics site has detected: (a) nine Surface Water samples greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA; (b) approximately 26 Effluent (WWTP) samples greater than or equal to 70 ppt PFOS and PFOA; and (c) approximately 199 Effluent (LP&P) samples greater than or equal to 70 ppt PFOS and PFOA.

340. PFAS testing at the Lapeer Plating & Plastics site has also detected five Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

341. Other PFAS analytes have been detected in samples at the Lapeer Plating & Plastics site.

22. Fort Gratiot Landfill, Fort Gratiot Township, St. Clair County.⁹⁶

342. The Fort Gratiot Landfill site is located at and around a former industrial landfill.

343. PFAS testing at the Fort Gratiot Landfill site has detected: (a) fourteen Groundwater samples greater than or equal to 70 ppt PFOS and PFOA; and (b) eight Surface Water samples greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA.

⁹⁶ Michigan PFAS Action Response Team, *Fort Gratiot Landfill, Fort Gratiot Township, St. Clair County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-490707--,00.html (updated December 5, 2019) (accessed January 10, 2020).

344. PFAS testing at the Fort Gratiot Landfill site has also detected: (a) fourteen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) eight Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

345. Other PFAS analytes have been detected in samples at the Fort Gratiot Landfill site.

23. Thermofil, Green Oaks Township, Livingston County.⁹⁷

346. The Thermofil site is located at and around a former metal stamping facility and former plastic manufacturer facility.

347. PFAS testing at the Thermofil site has detected five Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

348. PFAS testing at the Thermofil site has also detected nineteen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

349. Other PFAS analytes have been detected in samples at the Thermofil site.

⁹⁷ Michigan PFAS Action Response Team, *Thermofil, Green Oaks Township, Livingston County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-500859--,00.html (updated December 11, 2019) (accessed January 10, 2020).

24. MacDermid Inc., Ferndale, Oakland County.⁹⁸

350. The MacDermid Inc. site is located at and around a former chemical manufacturing and warehouse facility.

351. PFAS testing at the MacDermid Inc. site has detected: (a) two Groundwater samples greater than or equal to 70 ppt PFOS and PFOA; and (b) one Surface Water sample greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA.

352. Other PFAS analytes have been detected in samples at the MacDermid Inc. site.

25. RACER 12950 Eckles Road, Livonia, Wayne County.⁹⁹

353. The RACER 12950 Eckles Road site is located at and around a former automotive manufacturer site.

354. PFAS testing at the RACER 12950 Eckles Road site has detected seventeen Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

355. PFAS testing at the RACER 12950 Eckles Road site has also detected 40 Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

356. Other PFAS analytes have been detected in samples at the RACER 12950 Eckles Road site.

⁹⁸ Michigan PFAS Action Response Team, *MacDermid Inc., Ferndale, Oakland County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-490716--,00.html (updated December 11, 2019) (accessed January 10, 2020).

⁹⁹ Michigan PFAS Action Response Team, *RACER 12950 Eckles Road, Livonia, Wayne County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-485523--,00.html (updated December 12, 2019) (accessed January 10, 2020).

26. Gordie Howe International Bridge, Detroit, Wayne County.¹⁰⁰

357. The Gordie Howe International Bridge site is located at and around an area of historical heavy industrial, commercial, and residential properties.

358. PFAS testing at the Gordie Howe International Bridge site has detected nine Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

359. PFAS testing at the Gordie Howe International Bridge site has also detected thirteen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

360. Other PFAS analytes have been detected in samples at the Gordie Howe International Bridge site.

27. Ford Motor Company—Saline Plant, Saline, Washtenaw County.¹⁰¹

361. The Ford Motor Company—Saline Plant site is located at and around an automotive manufacture facility.

¹⁰⁰ Michigan PFAS Action Response Team, *Gordie Howe International Bridge, Detroit, Wayne County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-493752--,00.html (updated November 13, 2019) (accessed January 10, 2020).

¹⁰¹ Michigan PFAS Action Response Team, *Ford Motor Company—Saline Plant, Saline, Washtenaw County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-497629--,00.html (updated December 11, 2019) (accessed January 10, 2020).

362. PFAS testing at the Ford Motor Company—Saline Plant site has detected eight Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

363. PFAS testing at the Ford Motor Company—Saline Plant site has also detected nineteen Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

364. Other PFAS analytes have been detected in samples at the Ford Motor Company—Saline Plant site.

28. Washtenaw Industrial Facility LLC (former Universal Die Cast), Saline, Washtenaw County.¹⁰²

365. The Washtenaw Industrial Facility LLC site is located at and around a former plating facility.

366. PFAS testing at the Washtenaw Industrial Facility LLC site has detected 24 Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

367. PFAS testing at the Washtenaw Industrial Facility LLC site has also detected five Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA.

368. Other PFAS analytes have been detected in samples at the Washtenaw Industrial Facility LLC site.

¹⁰² Michigan PFAS Action Response Team, *Washtenaw Industrial Facility LLC (former Universal Die Cast), Saline, Washtenaw County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-489606--,00.html (updated November 13, 2019) (accessed January 10, 2020).

29. Ford River Raisin Warehouse, Monroe, Monroe County.¹⁰³

369. The Ford River Raisin Warehouse site is located at and near former steel milling, metal stamping, and metal forging, and automotive manufacturing facilities.

370. PFAS testing at the Ford River Raisin Warehouse site has detected two Monitoring Well samples greater than or equal to 70 ppt PFOS and PFOA.

371. PFAS testing at the Ford River Raisin Warehouse site has also detected three Monitoring Well samples between Non-Detection and 70 ppt PFOS and PFOA.

372. Other PFAS analytes have been detected in samples at the Ford River Raisin Warehouse site.

30. Cottage Grove and Marshall Area, Grand Rapids, Kent County.¹⁰⁴

373. The Cottage Grove and Marshall Area site is located at and near several metal plating operations.

374. PFAS testing at the Cottage Grove and Marshall Area has detected one Groundwater sample greater than or equal to 70 ppt PFOS and PFOA.

¹⁰³ Michigan PFAS Action Response Team, *Ford River Raisin Warehouse, Monroe, Monroe County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-509559--,00.html (updated November 13, 2019) (accessed January 10, 2020).

¹⁰⁴ Michigan PFAS Action Response Team, *Cottage Grove and Marshall Area, Grand Rapids, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-510793--,00.html (updated December 11, 2019) (accessed January 10, 2020).

375. Other PFAS analytes have been detected in samples at the Cottage Grove and Marshall site.

31. Former Chrysler Scio Introl Division, Dexter, Washtenaw County.¹⁰⁵

376. The Former Chrysler Scio Introl Division Site is located at and near a former automotive manufacturing facility.

377. PFAS testing at the Former Chrysler Scio Introl Division site has detected six Monitoring Well samples greater than or equal to 70 ppt PFOS and POFA.

378. PFAS testing at the Former Chrysler Scio Introl Division site has also detected: (a) 23 Monitoring Well samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) four Stormwater Outfall samples between Non-Detection and 122 ppt PFOS and 12,000 ppt PFOA.

379. Other PFAS analytes have been detected at the Former Chrysler Scio Introl Division site.

¹⁰⁵ Michigan PFAS Action Response Team, *Former Chrysler Scio Introl Division, Dexter, Washtenaw County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-511656--,00.html (updated December 11, 2019) (accessed January 10, 2020).

32. Former Keeler Brass—32nd Street, Kentwood, Kent County.¹⁰⁶

380. The Former Keeler Brass—32nd Street site is located at and near a former automotive parts washing and metal plating facility.

381. PFAS testing at the Former Keeler Brass—32nd Street site has detected one Groundwater sample greater than or equal to 70 ppt PFOS and PFOA.

382. Other PFAS analytes have been detected at the Former Keeler Brass 32nd Street site.

33. Lacks Industries—Saranac, Ionia County.¹⁰⁷

383. The Lacks Industries—Saranac site is located at and near a former metal plating and plastics facility.

384. PFAS testing at the Lacks Industries—Saranac site has detected four Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

385. PFAS testing at the Lacks Industries—Saranac site has also detected two samples between Non-Detection and 70 ppt PFOS and PFOA.

386. Other PFAS analytes have also been detected at the Lacks Industries—Saranac site.

¹⁰⁶ Michigan PFAS Action Response Team, *Former Keeler Brass—32nd Street, Kentwood, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-510794--,00.html (updated November 14, 2019) (accessed January 10, 2020).

¹⁰⁷ Michigan PFAS Action Response Team, *Lacks Industries—Saranac, Ionia County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-487733--,00.html (updated November 13, 2019) (accessed January 10, 2020).

34. State Disposal Superfund Site, Plainfield Township, Kent County.¹⁰⁸

387. The State Disposal Superfund Site is located at and near a former waste disposal facility.

388. PFAS testing at the State Disposal Superfund Site has detected 47 Groundwater samples equal to or greater than 70 ppt PFOS and PFOA.

389. PFAS testing at the State Disposal Superfund Site has also detected: (a) nine Drinking Water (Residential) samples between Non-Detection and 70 ppt PFOS and PFOA; (b) 36 Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (c) two Surface Water Samples between Non-Detection and 12 ppt PFOS and 12,000 ppt PFOA.

390. Other PFAS analytes have also been detected at the State Disposal Superfund Site.

35. Wash King Laundry, Baldwin, Lake County.¹⁰⁹

391. The Wash King Laundry site is located at and near a former commercial laundry facility.

392. PFAS testing at the Wash King Laundry site has detected four Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

¹⁰⁸ Michigan PFAS Action Response Team, *State Disposal Superfund Site, Plainfield Township, Kent County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-452840--,00.html (updated December 11, 2019) (accessed January 10, 2020).

¹⁰⁹ Michigan PFAS Action Response Team, *Wash King Laundry, Baldwin, Lake County*, https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95645-481160--,00.html (updated October 9, 2019) (last accessed January 10, 2020).

393. PFAS testing at the Wash King Laundry site has also detected: (a) two Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; (b) three Residential Drinking Water samples between Non-Detection and 70 ppt PFOS and PFOA; and (c) two Surface Water samples between Non-Detection and 12 ppt PFOS and 12,000 PFOA.

394. Other PFAS analytes have also been detected at the Wash King Laundry site.

36. Central Sanitary Landfill, Pierson, Montcalm County.

395. The Central Sanitary Landfill site is an operating licensed landfill in Pierson, Michigan.

396. PFAS testing at the Central Sanitary Landfill site has detected 39 Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

397. PFAS testing at the Central Sanitary Landfill site has also detected: (a) 38 Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; and (b) six Residential Drinking Water samples between Non-Detection and 70 ppt PFOS and PFOA.

398. Other PFAS analytes have also been detected at the Central Sanitary Landfill site.

37. Northeast Gravel, Belmont, Kent County.

399. The Northeast Gravel site, currently a golf course, was formerly a licensed landfill.

400. PFAS testing at the Northeast Gravel site has detected eight Groundwater samples greater than or equal to 70 ppt PFOS and PFOA.

401. PFAS testing at the Northeast Gravel site has detected eight Surface Water samples greater than or equal to 12 ppt PFOS and 12,000 ppt PFOA.

402. PFAS testing at the Northeast Gravel site has also detected: (a) two Groundwater samples between Non-Detection and 70 ppt PFOS and PFOA; (b) one Surface Water sample between Non-Detection and 12 ppt of PFOS and 12,000 ppt of PFOA; and (c) two Residential Well samples between Non-Detection and 70 ppt PFOS and PFOA.

403. Other PFAS analytes have also been detected at the Northeast Gravel site.

D. State natural resource and property damage.

404. PFAS contamination at the locations identified above and at yet to be identified locations has injured the State's natural resources and/or adversely impacted their beneficial public trust uses including those for drinking water, recreation, fishing, agriculture, and other uses.

405. PFAS contamination in Michigan, as identified above and at yet to be identified locations of PFAS contamination has substantially damaged the intrinsic value of these State natural resources.

406. Michigan and its residents have been deprived of the full use, enjoyment, and benefit of the State's public trust resources, and the intrinsic value of such State natural resources, and have been substantially harmed by PFAS

contamination as identified above, and at yet to be identified locations of PFAS contamination throughout the State.

407. The State's natural resources and property will continue to be harmed and injured for the foreseeable future by the ongoing release and/or spread of PFAS as identified above, and at yet to be identified locations of PFAS contamination throughout the State.

408. Defendants' acts and/or omissions have caused and/or contributed to PFAS contamination as identified above, and at yet to be identified locations of PFAS contamination throughout the State.

409. To the extent that Defendants did not own or operate any of the PFAS Sites or facilities that released PFAS to the PFAS Sites, Defendants knew or should have known that PFAS would be released or disposed of from facilities into the PFAS Sites and did not take any action to ensure that the owners or operators properly disposed of PFAS.

410. Defendants failed to disclose the environmental and health risks of PFAS that were known or should have been known to them, to consumers, users, or to the State.

411. Because Defendants failed to disclose the environmental and health risks of PFAS, the risks associated with PFAS were unknown to the users of consumer, household, and commercial products containing PFAS, were unknown to the State, and were generally unknown to those other than Defendants who could have reduced or limited the PFAS contamination and injury described above.

412. As manufacturers, marketers, and sellers of PFAS, Defendants were in the best position to reduce the risk of harm of their products.

413. Each of the State's natural resources is precious, limited, and invaluable, as described in more detail below.

1. Groundwater.

414. Groundwater is a precious, limited, and invaluable State natural resource that is used for drinking water, irrigation, agriculture, and other important purposes.

415. Agriculture is a significant industry in Michigan, where the food and agriculture system accounts for an estimated \$104.7 billion in direct, indirect, and induced economic activity annually.

416. Agriculture accounts for approximately 805,000 jobs in the State of Michigan.

417. Approximately 45% of Michiganders rely upon groundwater as a source for their drinking water.¹¹⁰

418. State natural resources, including groundwater, are vital to the health, safety, and welfare of Michigan's residents, and to the State's economy and ecology.

¹¹⁰ Michigan Department of Environment, Great Lakes, and Energy (f/k/a Michigan Department of Environmental Quality), *Fact Sheet: Groundwater Statistics*, https://www.michigan.gov/documents/deq/deq-wd-gws-wcu-groundwaterstatistics_270606_7.pdf (rev. January 2018) (accessed January 10, 2020).

419. Defendants' PFAS have contaminated and damaged the State's groundwater in locations throughout the State as identified above, and at yet to be identified sites of PFAS contamination.

420. Defendants' PFAS have contaminated and damaged drinking water that is drawn from groundwater sources in locations throughout the State, including as identified above, and at yet to be identified sites of PFAS contamination.

421. Ongoing additional testing continues to reveal further PFAS contamination and injury of groundwater in locations throughout Michigan.

422. It is certain that additional testing will reveal further PFAS contamination and injury of groundwater in locations throughout Michigan.

2. Surface waters.

423. Surface waters are precious, limited, and invaluable State natural resources that are used for drinking water, irrigation, recreation such as swimming and fishing, and ecological and other important purposes.

424. The Great Lakes—Superior, Huron, Michigan, Ontario and Erie—comprise the largest body of fresh water on Earth, holding nearly 21% of the world's fresh surface water and more than 84% of North America's fresh surface water.¹¹¹

¹¹¹ U.S. EPA, *Facts and Figures About the Great Lakes*, <https://www.epa.gov/greatlakes/facts-and-figures-about-great-lakes> (accessed January 10, 2020).

425. 3,288 miles of Michigan's border is along the shores of Lake Michigan, Lake Superior, Lake Huron, and Lake Erie.¹¹²

426. There are also more than 11,000 inland lakes of five acres in size or larger in Michigan. According to the Michigan Historical Society, a person in Michigan is never more than six miles from an inland lake or more than 85 miles from the shore of the Great Lakes.¹¹³

427. Michigan's Great Lakes include some of most majestic natural shorescapes on the planet and the State's tourism and recreation industries are dependent upon clean water, including surface waters.

428. Michigan's Great Lakes shoreline and its inland lakes are commercially, recreationally, aesthetically, and ecologically important to the State and its residents, including by supporting aquatic ecosystems, and biota such as fish.

429. Tourism is a significant industry in Michigan.

430. In 2018, approximately 124.8 million visitors came to Michigan and spent approximately \$25.7 billion in the State.

¹¹² Michigan.gov, *Does Michigan Have the Longest Coast Line in the United States?* <https://www.michigan.gov/som/0,4669,7-192-26847-103397--,00.html> (accessed January 10, 2020).

¹¹³ Michigan State University, Michigan Inland Lake Partnership, *FAQ*, <https://www.canr.msu.edu/michiganlakes/faq> (accessed January 10, 2020).

431. In 2018, the tourism industry supports approximately 6.0% of all jobs in Michigan and generated approximately \$2.8 billion in state and local taxes.¹¹⁴

432. A significant portion of Michigan's tourism industry relates to outdoor recreation.

433. Outdoor recreation is also vitally important to Michigan residents.

434. A 2017 telephone survey conducted by Public Sector Consultants on behalf of the Michigan Department of Natural Resources established that 54% of surveyed individuals swam outdoors in Michigan, 41% of surveyed individuals fished in Michigan, 32% of surveyed individuals canoed, kayaked, used stand-up paddle boards, or went wind surfing in Michigan, and 31% of surveyed individuals used motor boats.¹¹⁵

435. Defendants' PFAS have contaminated and injured the State's surface waters in locations throughout the State, as identified above, and at yet to be identified sites of PFAS contamination.

436. Ongoing additional testing continues to reveal further PFAS contamination and injury of surface waters in locations throughout Michigan.

437. It is certain that additional testing will reveal further PFAS contamination in surface waters in locations throughout Michigan.

¹¹⁴ Tourism Economics, *Economic Impact of Tourism in Michigan*, 2018 p 3, <https://medc.app.box.com/s/oheae2919u5204v6myfviuhph5ax5btp> (accessed January 10, 2020).

¹¹⁵ Public Sector Consultants and The Michigan Department of Natural Resources, *Michigan Statewide Comprehensive Outdoor Recreation Plan: 2018-2022*, p 11, https://publicsectorconsultants.com/wp-content/uploads/2018/09/SCORP2018-2022_Final.pdf (accessed January 10, 2020).

3. Wildlife, soils, and sediment.

438. Wildlife, soil, and sediments are precious, limited, and of great value to State natural resources.

439. Michigan's fish and other wildlife are used for food, recreational purposes, and provide a significant economic benefit to the State, including through tourism and recreation.

440. Injuries to wildlife affect not only individual wildlife, but the entire ecosystem of which they are a part.

441. Soil and sediments are part of or interconnected with the health of the State's natural resources such as surface waters, groundwater, and wildlife, and provide numerous values and services, including but not limited to recreation, tourism, and agriculture.

442. Sediments are important as habitat for wildlife including fish, among other important ecological uses; and soils may contain contaminants that migrate to groundwater.

443. A healthy and functioning ecosystem depends upon the interplay between non-impaired soils, sediments, and wildlife.

444. The State's investigation and response are ongoing given the scope of the problem and that knowledge of the public health and environmental risks associated with PFAS is evolving.

445. It is certain that additional testing will reveal further PFAS contamination and injury of soils, sediments, and wildlife in locations throughout Michigan.

E. New PFAS contamination continues to be discovered and existing contamination continues to injure State natural resources and property.

446. PFAS has contaminated State natural resources and property throughout the State and has injured the State's natural resources, threatens State residents' health, safety, and welfare, and interferes with the use of these precious resources.

447. Given PFAS's properties, including their resistance to biodegradation and their solubility, PFAS continues to move through groundwater, surface waters, and soils, and other natural resources, and cause initial contamination in new locations, adversely impacting State natural resources and property.

448. PFAS continue to move through the environment and contaminate and injure State natural resources and property at a number of locations throughout the State with known PFAS contamination.

449. In addition to the known PFAS Sites that have already been discovered and are specifically enumerated above, the State seeks a remedy through this lawsuit for contamination at any site within the State of Michigan where PFAS have been detected, or in the future will be detected, at any of the following levels:

- (a) Groundwater sampling greater than or equal to 70 ppt of PFOS and PFOA (*i.e.*, exceeding EGLE's Part 201 cleanup criteria);
- (b) Drinking Water sampling greater than or equal to 70 ppt of PFOS and PFOA (*i.e.*, exceeding the U.S. EPA's LHA);
- (c) Surface Water sampling greater than or equal to 12 ppt of PFOS and 12,000 ppt of PFOA (*i.e.*, exceeding Michigan Rule 57 Values); and
- (d) Any other sampling at any level that exceeds a Michigan or other applicable standard.

450. Defendants' acts and omissions directly and proximately caused and continue to cause PFAS to intrude into and contaminate and injure these natural resources and property.

451. There are proven and preliminary remedial techniques for cleaning up PFAS in environmental media, and for successfully treating drinking water.

452. Absent use of remediation and treatment methods, PFAS contamination will continue to spread through the State's natural resources and property. Although PFAS are persistent in the environment, PFAS can be successfully remediated in certain natural resources and/or successfully treated, but at significant expense.

453. PFAS contamination levels in State natural resources including groundwater and drinking water typically fluctuate (*i.e.*, increase and decrease) over time as PFAS moves through groundwater and due to other factors, including changes in seasonal precipitation levels. PFAS levels can fluctuate at a single PFAS contamination site over time. For this reason, the only way to be certain that PFAS no longer exists in State natural resources such as groundwater or drinking water is to remediate or treat the PFAS.

454. PFAS' presence and migration in State natural resources and property, absent large-scale and costly remediation and/or treatment, will continue indefinitely, and will continue to indefinitely threaten such natural resources and property.

455. Because of the injury PFAS have caused and are causing to State natural resources, Michigan's natural resources require restoration, including compensation for interim and permanent losses.

456. The State reserves its right to amend this Complaint as additional evidence of PFAS contamination comes to light including, but not limited to, PFAS contamination of wildlife, soils, sediments, and other State natural resources.

CLAIMS FOR RELIEF

FIRST CAUSE OF ACTION

LIABILITY UNDER PART 201 OF THE NREPA (Against All Defendants)

457. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

458. The purpose of Part 201 of the NREPA is to provide for appropriate response activities to eliminate unacceptable risks to public health, safety, or welfare, or to the environment from environmental contamination at facilities within the State of Michigan. MCL 324.20102(c).

459. Part 201 of the NREPA authorizes the Attorney General, on behalf of the State, to commence a civil action seeking, inter alia, “[t]emporary or permanent injunctive relief necessary to protect the public health, safety, or welfare, or the environment from the release or threat of release,” and a “declaratory judgment on liability for future response activity costs and damages.” MCL 324.20137(1).

460. PFAS are “hazardous substances” under Part 201 of the NREPA, MCL 324.20101(1)(x).

461. The PFAS known as PFOA and PFOS are “hazardous substances” under Part 201 of the NREPA, MCL 324.20101(1)(x), based upon EGLE’s establishment of residential drinking water cleanup criteria for PFOA and PFOS under Mich. Admin. Code R 299.6(12), effective January 10, 2018.

462. The PFAS other than those known as PFOA and PFOS are “hazardous substances” under Part 201 of the NREPA, MCL 324.20101(1)(x), because EGLE has determined that these substances pose an unacceptable risk to the public health, safety, or welfare, or the environment, considering the fate of the material, dose-response, toxicity, or adverse impact on natural resources.

463. The leaking, emitting, discharging, escaping, leaching, dumping and disposal of hazardous substances constitute a “release” or “threat of release” as those terms are defined in MCL 324.20101(1)(pp) and MCL 324.20101(1)(ccc).

464. PFAS have been released into each of the PFAS Sites.

465. EGLE has established cleanup criteria for PFOA and PFOS for exposure pathways including groundwater-surface water interface, and groundwater as a source of drinking water. MCL 324.20120e(1)(a), Mich. Admin. Code R. 299.6(12).

466. As a result of the testing conducted by MPART in 2018 and 2019, the State has discovered PFAS at the PFAS Sites.

467. The levels of PFOA and PFOS in groundwater at and around the PFAS Sites exceed the concentrations that satisfy the criteria under Part 201.

468. The levels of other PFAS in groundwater at and around the PFAS Sites pose an unacceptable risk to the public health, safety, or welfare, or the environment, considering the fate of the material, dose-response, toxicity, or adverse impact on natural resources.

469. Samples taken in groundwater discharging to surface water at and around the locations identified above exceed the generic groundwater-surface water interface cleanup criteria for PFOA and PFOS.

470. The PFAS Sites constitute an area, place, parcel or parcels of property, or portion of a parcel of property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located.

471. MCL 324.20126(1), provides, in pertinent part, that:

Notwithstanding any other provision or rule of law and except as provided in subsections (2), (3), (4), and (5) and section 20128, the following persons are liable under this part:

(a) The owner or operator of a facility if the owner or operator is responsible for an activity causing a release or threat of release.

(b) The owner or operator of a facility at the time of disposal of a hazardous substance if the owner or operator is responsible for an activity causing a release or threat of release.

(c) An owner or operator of a facility who becomes an owner or operator on or after June 5, 1995.

(d) A person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of a hazardous substance owned or possessed by the person, by any other person, at a facility owned or operated by another person and containing the hazardous substance.

(e) A person who accepts or accepted any hazardous substance for transport to a facility selected by that person.

472. Defendants manufactured the PFAS that the State discovered at the PFAS Sites as part of the testing MPART performed in 2018 and 2019.

473. Defendants owned or operated one or more PFAS Sites or facilities from which PFAS was released onto or into the PFAS sites.

474. Defendants are responsible for activities causing a release or threat of release to one or more of the PFAS Sites.

475. By contract, agreement, or otherwise, Defendants arranged for the disposal or treatment of PFAS, and/or arranged with a transporter for transport for disposal or treatment of PFAS, by the third-party purchasers of PFAS and/or PFAS-containing products, at facilities owned or operated by other persons, including but not limited to third-party purchasers of PFAS and/or PFAS-containing products.

476. Defendants accepted PFAS for transport to the PFAS Sites or facilities from which PFAS was released onto or into the PFAS Sites.

477. MCL 324.20126a, provides, in pertinent part, that:

(1) Except as provided in section 20126(2), a person who is liable under section 20126 is jointly and severally liable for all of the following:

(a) All costs of response activity lawfully incurred by the state relating to the selection and implementation of response activity under this part.

(3) The amounts recoverable in an action shall include interest. This interest shall accrue from the date payment is demanded in writing, or the date of expenditure or damage, whichever is later. The rate of interest on the outstanding unpaid balance of the accounts recoverable under this section shall be the same rate as specified in section 6013(8) of the revised judicature act of 1961, Act No. 236 of the Public Acts of 1961, being section 600.613 of the Michigan Compiled Laws.

(6) If the department determines that there may be an imminent and substantial endangerment to the public health, safety, or welfare, or to the environment because of an actual or threatened release from a facility, the attorney general may bring an action against any person who is liable under section 20126 or any other appropriate person to secure the relief that may be necessary to abate the danger or threat. The court has jurisdiction to grant such relief as the public interest and the equities of the case may require.

478. As a result of releases and threatened releases of hazardous substances for which Defendants are responsible, the State has incurred and is continuing to incur response activity costs, including investigation, monitoring, and enforcement costs, at the facilities.

479. MCL 324.20137(1), provides, in pertinent part, that:

[I]n addition to other relief authorized by law, the attorney general may, on behalf of the state, commence a civil action seeking one or more of the following:

(a) Temporary or permanent injunctive relief necessary to protect the public health, safety, or welfare, or the environment from the release or threat of release.

(b) Recovery of state response activity costs pursuant to Section 20126a.

(d) A declaratory judgment on liability for future response costs and damages.

(e) A civil fine of not more than \$10,000.00 for each day of noncompliance without sufficient cause with a written request of the department pursuant to section 20114(1)(h). A fine imposed under this subdivision shall be based on the seriousness of the violation and any good faith efforts of the person to comply with this part.

(f) A civil fine of not more than \$1,000.00 for each day of violation of this part. A fine imposed under this subdivision shall be based upon the seriousness of the violation and any good faith efforts of the person to comply with this part.

(k) Any other relief necessary for the enforcement of this part.

480. Under MCL 324.20126a and MCL 324.20137(1), the State seeks declaratory relief that Defendants are jointly and severally responsible for performing all further response activities necessary to protect the public health, safety, or welfare, or the environment from the release or threat and release of hazardous substances, and is liable for the State's past and future response activity costs and costs of surveillance and performance related to its investigation and implementation of other response activities, including, but not limited to, costs related to providing an alternative water supply, costs related to health assessments or health-effect studies carried out under the supervision, or with the approval of, the Michigan Department of Health and Human Services related to

response activities, interest, and oversight of any future response activities that Defendants may perform.

481. Under MCL 324.20114(1), and as persons who may be held liable under persons MCL 324.20126(1)(d), Defendants have an affirmative obligation, with or without notice or demand, to determine the nature and extent of their releases of PFAS and to diligently pursue response activities necessary to achieve the cleanup criteria specified in Part 201 and its implementing rules.

482. Based on information gathered to date, the State has determined that unacceptable exposures to PFAS currently exist to drinking water well users and, therefore, replacement of such PFAS-affected drinking water wells with alternate water supplies is necessary to protect public health, safety, or welfare.

483. Defendants are obligated to demonstrate to the State's satisfaction that their PFAS analysis and proposal for provision of alternate water supplies mitigates current and future unacceptable risks to human health.

484. The State further seeks statutory penalties, civil fines, and any other relief available under MCL 324.20137(1).

485. The State is entitled to relief under Section 20137 of Part 201 of the NREPA, MCL 324.20137, requiring Defendants to take such action as may be necessary to protect the public health, safety, or welfare, or the environment.

SECOND CAUSE OF ACTION
LIABILITY UNDER PART 17 OF THE NREPA
(Against All Defendants)

486. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

487. Part 17 of the NREPA authorizes the Attorney General, on behalf of the State, to maintain a civil action “for declaratory and equitable relief against any person for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction.”

MCL 324.1701(1). Part 17 of the NREPA is commonly referred to as the “Michigan Environmental Protection Act.”

488. Part 17 of the NREPA applies to pollution of surface water and groundwater contamination.

489. As set forth in more detail above, surface water and groundwater have been contaminated at or around numerous locations in Michigan.

490. Part 17 of the NREPA authorizes the Court to grant declaratory and equitable relief, to impose conditions on the defendant to protect the environment, to direct the adoption of antipollution standards, or to remand a case to appropriate administrative proceedings. It allows the court to fashion standards in the context of actual problems as they arise in individual cases.

491. Accordingly, under Part 17 of the NREPA, MCL 324.1701 *et seq.*, the State seeks declaratory relief holding Defendants to be jointly and severally responsible for performing all further response activities necessary to protect the

public health, safety, or welfare or the environment from the release or threat and release of hazardous substances, and are liable for the State's past and future response activity costs and costs of surveillance and performance related to its investigation and implementation of other response activities, including, but not limited to, costs related to providing an alternative water supply, costs related to health assessments or health-effect studies carried out under the supervision, or with the approval of, the Michigan Department of Health and Human Services related to response activities, interest, and oversight of any future response activities.

THIRD CAUSE OF ACTION
LIABILITY UNDER PART 31 OF THE NREPA
(Against All Defendants)

492. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

493. Part 31 of the NREPA, MCL 324.3101 *et seq.* is Michigan's primary pollution control statute. Part 31 of the NREPA has the dual purpose of protecting water quality and regulating water-waste disposal. Under MCL 324.3103(1), the Michigan Department of Natural Resources and Environment has the duty and authority to "protect and conserve the water resources of the state." "Waters of the state" includes both surface and underground waters.

494. MCL 324.3115(1) provides that the Attorney General may commence a civil action for appropriate relief, including a permanent or temporary injunction, for violations of Part 31 of the NREPA or its implementing rules.

495. MCL 324.3109(1) prohibits the direct or indirect discharge of any substance into the waters of the State that is or may become injurious to: (a) “the public health, safety, or welfare”; (b) “domestic, commercial, industrial, agricultural, recreational, or other uses that are being made or may be made of such waters”; (c) “the value or utility of riparian lands”; (d) “livestock, wild animals, birds, fish, aquatic life, or plants or to their growth, or propagation”; and (e) “the value of fish and game.”

496. “Waters of the state’ means groundwaters, lakes, rivers, and streams and all other watercourses and waters, including the Great Lakes within the jurisdiction of [the State of Michigan.]” MCL 324.3101(aa).

497. Through their design, marketing, development, distribution, sale, manufacture, release, handling, supplying, and/or using PFAS and/or PFAS-containing products in Michigan, Defendants have directly or indirectly caused PFAS to be discharged into the waters of the state, and these discharges are or may become injurious to public health, fish, plants, aquatic life, and other designated uses of the waters of the state and, therefore, these practices are in violation of MCL 324.3109.

498. A violation of MCL 324.3109 is prima facie evidence of the existence of a public nuisance and “may be abated according to law in an action brought by the attorney general in a court of competent jurisdiction.” MCL 324.3109(7).

499. The State is entitled to relief requiring Defendants to take such action as may be necessary to abate the injurious PFAS discharged to the waters of the state as defined in Part 31 of the NREPA.

500. The State further seeks statutory penalties, fines, and any other relief available under Part 31.

501. In addition, Defendants knew or should have known that they directly or indirectly discharged substances that are or may become injurious to public health, fish, plants, aquatic life, and other designated uses of the waters of the State.

502. As a result, the value of the natural resources of the State have been significantly damaged. In addition, the State has incurred, and continues to incur, costs of surveillance and enforcement resulting from the violations of Part 31.

503. Pursuant to MCL 324.3115(2), the Attorney General brings this civil action “to recover the full value of the injuries done to the natural resources of the state and the costs of surveillance and enforcement by the state” resulting from Defendants’ violations of Part 31 of the NREPA, in amounts to be proven at the trial of this matter.

FOURTH CAUSE OF ACTION
VIOLATION OF THE MICHIGAN UNIFORM
FRAUDULENT TRANSFER ACT
(Against Defendants Historical DuPont; Corteva, Inc.;
E.I. DuPont de Nemours, Inc., and The Chemours Company)

504. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

505. Under the Michigan Uniform Fraudulent Transfer Act (MUFTA):

A transfer made or obligation incurred by a debtor is voidable as to a creditor, whether the creditor’s claim arose before or after the transfer was made or the obligation was incurred, if the debtor made the transfer or incurred the obligation in either of the following circumstances: (1) With actual intent to hinder, delay, or defraud any creditor or the debtor. (2) Without receiving a reasonably equivalent value in exchange for the transfer or obligation, and the debtor did either of the following: (i) Was engaged or was about to engage in a business or a transaction for which the remaining assets of the debtor were unreasonably small in relation to the business or transaction; or (ii) Intended to incur, or believed or reasonably should have believed that the debtor would incur, debts beyond the debtor’s ability to pay as they became due. (MCL 566.34.)

506. The “MUFTA Defendants,” *i.e.*, Historical DuPont, Corteva, Inc., E.I. DuPont de Nemours, Inc., and The Chemours Company, have: (a) acted with actual intent to hinder, delay, and defraud parties; and/or (b) without receiving a reasonably equivalent value in exchange for the transfer or obligation, and (i) were engaged or were about to engage in a business for which the remaining assets of The Chemours Company were unreasonably small in relation to the business; or (ii) intended to incur, or believed or reasonably should have believed that The Chemours Company would incur, debts beyond its ability to pay as they became due.

507. The MUFTA Defendants engaged in acts in furtherance of a scheme to transfer Historical DuPont's assets out of the reach of parties such as the State of Michigan that have been damaged as a result of the MUFTA Defendants' conduct, omissions, and actions described in this Complaint.

508. It is primarily Historical DuPont, rather than The Chemours Company, that, for decades, manufactured, marketed, distributed, and/or sold PFAS and/or products containing PFAS with the superior knowledge that they were toxic, mobile, persistent, bio-accumulative, and biomagnifying, and through normal and foreseen use, would impact the State natural resources.

509. As a result of the transfer of assets and liabilities described in this Complaint, the MUFTA Defendants have attempted to limit the availability of assets to cover judgments for all of the liability for damages and injuries from the manufacturing, marketing, distribution, and/or sale of PFAS and products containing PFAS.

510. At the time of the transfer of its Performance Chemicals Business to The Chemours Company, Historical DuPont had been sued, threatened with suit, and/or had knowledge of the likelihood of litigation to be filed regarding DuPont's liability for damages and injuries from the manufacturing, marketing, distribution, and/or sale of PFAS and/or products containing PFAS.

511. The MUFTA Defendants acted without receiving a reasonably equivalent value in exchange for the transfer or obligation, and Historical DuPont believed or reasonably should have believed that The Chemours Company would incur debts beyond The Chemours Company's ability to pay as they became due.

512. At all times relevant to this action, the claims, judgments, and potential judgments against The Chemours Company potentially exceeded The Chemours Company's ability to pay.

513. Pursuant to MCL 566.34, the State seeks avoidance of any transfer of Historical DuPont liabilities for the claims brought in this Complaint and to hold the MUFTA Defendants liable for any damages or other remedies that may be awarded by the Court or jury under this Complaint.

514. The State further seeks all other rights and remedies that may be available to it under the MUFTA, including prejudgment remedies as available under applicable law, as may be necessary to fully compensate the State for the damages and injuries it has suffered as alleged in this Complaint.

FIFTH CAUSE OF ACTION
NEGLIGENCE
(Against All Defendants)

515. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

516. Defendants had a duty to the State to exercise due care in the design, marketing, development, distribution, sale, manufacture, release, handling, supply, and/or use of PFAS and products containing PFAS.

517. Defendants breached their duty of care in that they negligently, carelessly, and/or recklessly designed, marketed, developed, distributed, sold, manufactured, released, and/or otherwise handled, supplied, and/or used PFAS, and products containing PFAS directly and proximately caused PFAS to contaminate the State’s property and its groundwater, surface waters, fish, wildlife, marine resources, and other natural resources, thereby causing a threat to human health and the environment.

518. Defendants designed, marketed, developed, distributed, sold, manufactured, released, and/or otherwise handled, supplied, and/or used PFAS and/or products containing PFAS to downstream handlers, when they knew, or should have known, that PFAS would: (a) be released into the environment from industrial, commercial, and consumer uses and sources in the State; (b) be released and contaminate the State’s property, groundwater, surface waters, fish, wildlife, marine resources, and other natural resources; and (c) threaten the health and welfare of the State’s residents.

519. Despite Defendants' knowledge that contamination with PFAS was the inevitable consequence of their conduct as alleged herein, Defendants failed to provide reasonable warnings or special instructions, failed to take other reasonable precautionary measures to prevent or mitigate such contamination, and/or affirmatively misrepresented the hazards of PFAS in their product information and/or instructions for use.

520. As a direct and proximate result of the Defendants' acts and omissions as alleged herein, the State and its residents, which it represents *parens patriae*, have suffered monetary losses and damages in amounts to be proven at trial.

521. As a direct and proximate result of Defendants' acts and omissions as alleged herein, the State, in its capacity as trustee over the surface waters and groundwater, fish, wildlife, and marine resources, has suffered and continues to suffer damage from Defendants' conduct which has caused or otherwise facilitated the presence of PFAS in the State's surface waters and groundwater, fish, wildlife, marine resources and other natural resources, including without limitation costs to assess, investigate, monitor, analyze, and remediate, to prevent PFAS from injuring additional public trust resources, and to restore or replace the State's impacted surface waters and groundwater, fish, wildlife, and marine resources whose use has been lost or degraded.

SIXTH CAUSE OF ACTION
TRESPASS
(Against All Defendants)

522. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

523. The PFAS that Defendants manufactured and/or supplied, affecting the State’s property and its groundwater, surface waters, fish, wildlife, marine resources, and other natural resources constitutes an unauthorized direct and immediate physical intrusion of property in which the State and/or a substantial number of its residents have exclusive possessory interests.

524. The trespass of PFAS alleged herein has varied over time and has not ceased.

525. The PFAS that Defendants manufactured and/or supplied continued to be located on or in the State’s property and its groundwater, surface water, fish, wildlife, marine resources, and other natural resources.

526. Defendants intended to manufacture PFAS and products that contain PFAS, and Defendants knew with substantial certainty that their acts would contaminate the State’s property and its surface waters and groundwater, fish, wildlife, marine resources, and other natural resources.

527. Defendants are liable for trespass.

528. The trespass has caused significant harm resulting from Defendants' unreasonable interference with the use or enjoyment of the State's property and its surface waters and groundwater, fish, wildlife, marine resources, and other natural resources.

529. The State has not consented to and does not consent to the trespass alleged herein.

530. The State brings this claim as the exclusive owner of the property and interests in property, as well as in both its public trustee and *parens patriae* capacities.

531. The State has a duty to protect and restore its natural resources and protect the health and comfort of its residents.

532. In its *parens patriae* capacity, the State may protect its quasi-sovereign interests, including the State's interest in the well-being of its residents, as well as its residents' interest in the integrity of the State's natural resources.

533. Accordingly, the State brings this action for the invasion of its own and a substantial number of its residents' exclusive possessory interests in the State's natural resources.

534. As long as the State's property and natural resources remain contaminated due to Defendants' conduct, the trespass continues and is ongoing.

535. As a direct and proximate result of Defendants' acts and omissions as alleged herein, the State and its residents, which it represents *parens patriae*, have suffered monetary losses and damages in an amount to be proven at trial.

536. As a direct and proximate result of Defendants' acts and omissions, as alleged herein, the State is further entitled to an order requiring Defendants to abate their ongoing trespass and money damages for the cost of the restoration of the property to its original conditions, including all amounts necessary to conduct such investigation, remediation, cleanup, restoration, removal, treatment and monitoring actions as are necessary to prevent further trespasses and damages to the State's property and groundwater, surface waters, fish, marine resources, and other natural resources.

SEVENTH CAUSE OF ACTION

PUBLIC NUISANCE (Against All Defendants)

537. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

538. Defendants designed, marketed, developed, distributed, sold, manufactured, released, and/or otherwise handled, supplied, and/or used PFAS and/or products containing PFAS in a manner that created or participated in creating a public nuisance that unreasonably interferes, endangers, or injures the property, health, safety, and welfare of the general public and the State of Michigan.

539. Defendants, by their negligent, reckless, and willful acts and omissions as set forth above, have, among other things, knowingly unleashed PFAS contamination in State natural resources and property throughout Michigan,

having concealed the threat, thereby causing and threatening to cause PFAS contamination of the State's natural resources and property. Defendants' PFAS continues to spread in and contaminate more State natural resources and property throughout the State.

540. Each Defendant has caused, contributed to, maintained, and/or participated in a public nuisance by substantially and unreasonably interfering with, obstructing and/or threatening, among other things: (a) Michigan residents' common public rights to enjoy State natural resources and property free from unacceptable health risk, pollution, and contamination; and (b) the State's *parens patriae* and public trust abilities to protect, conserve, and manage the State's natural resources.

541. Each Defendant has, at all times relevant to this action, caused, contributed to, maintained, and/or participated in the creation of such public nuisance. Among other things, each Defendant is a substantial contributor to such public nuisance as follows:

(1) Defendants manufactured, marketed, distributed, promoted, sold, and/or otherwise placed into the stream of commerce PFAS and/or products containing PFAS when they knew, or reasonably should have known, that PFAS would escape from industrial processes and household, consumer, and commercial products and contaminate State natural resources and property;

(2) Defendants manufactured, marketed, distributed, promoted, sold, and/or otherwise placed into the stream of commerce PFAS and/or products containing PFAS that were delivered into the State (and areas affecting the State's natural resources and property), when they knew, or reasonably should have known, that PFAS would be released readily into the environment during the normal, intended, and foreseeable uses of PFAS and products containing PFAS; and when released, PFAS would persist in the environment and not break down, contaminate State natural resources and property, including soils, sediments, groundwater, surface waters, wildlife, and drinking water supplies, and, ultimately, be difficult and costly to remove; and

(3) Defendants manufactured, marketed, distributed, promoted, sold, and/or otherwise placed into the stream of commerce PFAS and/or products containing PFAS that were delivered into the State (and areas affecting the State's natural resources and property), when they knew, or reasonably should have known, that PFAS posed substantial risks to human health.

542. Defendants also had firsthand knowledge and experience regarding releases of PFAS to the environment, including groundwater and other natural resources, because each of them owned, operated, and/or controlled PFAS manufacturing facilities and/or facilities using PFAS where there were releases of PFAS into the surrounding environment that caused substantial contamination. For example, 3M owned, operated, and/or controlled a PFAS manufacturing facility

in Cottage Groves, Minnesota, and disposed of PFAS at sites located in the City of Oakdale, Minnesota; Cottage Grove and Woodbury, Minnesota; and the Washington County Landfill in City of Lake Elmo, Minnesota. There was substantial PFAS contamination associated with these 3M facilities. DuPont owned, operated, and/or controlled a PFAS manufacturing facility in Parkersburg, West Virginia, and the Chambers Works site in New Jersey. There was substantial PFAS contamination associated with these DuPont facilities.

543. Despite their knowledge that contamination of the State's natural resources and property with PFAS was the inevitable consequence of their conduct, Defendants failed to provide adequate warnings or special instructions, failed to take any other reasonable precautionary measures to prevent or mitigate such contamination, and/or affirmatively misrepresented the hazards of PFAS in their product information and/or instructions for use.

544. Defendants knew, or in the exercise of reasonable care should have known, that the introduction and use of PFAS would unreasonably and seriously endanger, injure, and interfere with the ordinary comfort, use, and enjoyment of natural resources and property relied upon by the State and its residents, as it has.

545. Defendants have caused, contributed to, maintained, and/or participated in a public nuisance that has caused substantial injury to the State's natural resources and property, in which the public has interests represented by and protected by the State in its trustee and *parens patriae* capacities. Defendants' conduct also threatens to cause substantial additional injury to the State's natural

resources and property. The public nuisance has caused and/or continues to threaten to cause substantial injury to property directly owned by the State.

546. The contamination of the State's natural resources and property with Defendants' PFAS is ongoing. PFAS continue to threaten, migrate into, and enter the State's natural resources and property, and cause new contamination in new locations.

547. As a direct and proximate result of Defendants' acts and omissions, the State's natural resources and property are contaminated with PFAS.

548. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment, monitoring, and other costs and expenses related to contamination of the State's natural resources and property.

549. Defendants' acts and omissions have caused and/or threatened to cause injuries to the State's natural resources and property that are indivisible.

550. The State is entitled to relief including damages and requiring Defendants to take such action as may be necessary to abate the injurious PFAS discharged to the groundwater and surface waters of the State by Defendants.

EIGHTH CAUSE OF ACTION

UNJUST ENRICHMENT (Against All Defendants)

551. The State repeats, realleges, and incorporates by reference the allegations contained in Paragraphs 1–455, above, as though fully set forth herein.

552. By common law and the principles of justice, a person or entity may not be inequitably enriched by receiving a benefit at another’s expense.

553. The principles of unjust enrichment are violated where a party steps in to address a duty owed by another to the public to protect the public from an urgent threat to their health, safety, or general welfare and pays expenses that rightfully should have been paid by the other person.

554. As described herein, Defendants have obtained revenue and profits from the production, sale, and use of PFAS and products that contain PFAS manufactured by Defendants that have resulted in PFAS contamination in the State of Michigan.

555. To address PFAS contamination in the State of Michigan in order to protect its residents and natural resources, the State has incurred, and continues to incur, substantial costs in investigating and responding to PFAS contamination throughout the State of Michigan.

556. Defendants have been unjustly enriched because they received a benefit from the State’s response activities and did not have to incur their own costs to investigate and remediate the PFAS contamination caused by or related to the

production, sale, use, and disposal of PFAS, and products that contain PFAS, manufactured by Defendants.

557. The principles of justice and established common law require Defendants to reimburse the State for performing a duty properly owed by Defendants as a result of their conduct, as alleged herein.

REQUEST FOR RELIEF

WHEREFORE, Plaintiffs, Attorney General Dana Nessel, on behalf of the People of the State of Michigan, and the State of Michigan, respectfully seeks entry of judgment in its favor and against Defendants for:

A. Compensatory damages arising from PFAS contamination and injury of State natural resources and property, including groundwater, surface waters, drinking water supplies, biota, wildlife (including fish), and their associated soils, sediments, and uses, and other State natural resources and property, according to proof, including, but not limited to:

- i. natural resource damages;
- ii. loss-of use damages;
- iii. costs of investigation;
- iv. costs of testing and monitoring;
- v. costs of providing water from an alternate source;
- vi. costs of installing and maintaining an early warning system to detect PFAS before it reaches wells;

- vii. costs of remediating PFAS from natural resources including groundwater, surface waters, soils, sediments, and other natural resources;
- viii. costs of remediating PFAS contamination at release sites;
- ix. any other costs or other expenditures incurred to address PFAS contamination and injury; and
- x. interest on the damages according to law;

B. Injunctive and equitable relief to compel Defendants to abate the continuing nuisance and trespass by enjoining the further use, sale, distribution, and discharge of PFAS in the State and compelling Defendants to remove PFAS from State natural resources and property;

C. Ordering that the State is entitled to avoid any transfer of Historical DuPont liabilities to The Chemours Company and put the State in the position it would have been had the transfer not occurred;

D. Punitive damages and such other damages as allowed by statute;

E. Costs (including reasonable attorney fees, court costs, and other reasonable litigation expenses);

F. Prejudgment interest; and

G. All other and further relief as the Court deems just, proper, and equitable.

JURY DEMAND

Plaintiffs, Attorney General Dana Nessel, on behalf of the People of the State of Michigan, and the State of Michigan the State of Michigan, demands a trial by jury of all issues so triable as a matter of right.

Respectfully submitted,

Dana Nessel
Attorney General

/s/ Polly A. Synk
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