STATE OF MINNESOTA
COUNTY OF HENNEPIN

DISTRICT COURT
FOURTH JUDICIAL DISTRICT

State of Minnesota, by its Attorney General Lori Swanson, its Commissioner of Pollution Control Paul Aasen, and its Commissioner of Natural Resources Tom Landwehr,

Plaintiff,

and

City of Lake Elmo, a Minnesota municipal corporation,

Plaintiff/Intervenor,

and

Metropolitan Council,

Plaintiff/Intervenor/
Counterclaim Defendant,

v.

3M Company,

Defendant/
Counterclaim Plaintiff.

Case Type: Other Civil
Civil File No. 27-CV-10-28862
Judge Margaret A. Daly

DEFENDANT 3M COMPANY'S ANSWER TO PLAINTIFF/INTERVENOR METROPOLITAN COUNCIL'S COMPLAINT AND COUNTERCLAIMS AGAINST METROPOLITAN COUNCIL

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HENN. CO. DISTRICT COURT ADMINISTRATOR

Defendant 3M Company ("3M") files this Answer to the Complaint of Plaintiff/Intervenor Metropolitan Council (the "Met Council"), as well as its Counterclaims against the Met Council, based on personal knowledge as to its own actions and on information and belief as to all other matters, as follows:

ANSWER

Pursuant to Minnesota Rule of Civil Procedure 8.02, 3M denies each and every material allegation asserted against 3M in the Met Council's Complaint (the "Complaint"), including any amendments or supplements thereto, except where any such allegation is expressly admitted, explained, or qualified herein.

1. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in the first sentence of paragraph 1 of the Complaint and, on that basis, denies those allegations. 3M denies the allegations contained in the second sentence of paragraph 1 of the Complaint.

2. The allegations contained in paragraph 2 of the Complaint are statements of the Met Council's intent. Accordingly, 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of those allegations and, on that basis, denies those allegations. Further, 3M states that the Complaint speaks for itself.

3. 3M admits the allegations contained in paragraph 3 of the Complaint.

4. The allegations contained in paragraph 4 of the Complaint are statements of law, to which no responsive pleading is required. To the extent a response is required, 3M alleges that the Commissioners of the Minnesota Pollution Control Agency ("MPCA") and the Minnesota Department of Natural Resources ("MDNR") are designated co-trustees of the State of Minnesota's natural resources.

5. 3M admits the allegation contained in paragraph 5 of the Complaint.

6. 3M admits the allegation contained in paragraph 6 of the Complaint, except that 3M's principal place of business is located at 3M Center, St. Paul, Minnesota.

7. 3M admits that the Met Council is a public corporation and political subdivision of the State of Minnesota pursuant to Minnesota Statute § 473.123, subd. 1. 3M states that the

remaining allegations contained in paragraph 7 of the Met Council's Complaint are statements of law to which no responsive pleading is required. To the extent a response is required, or if the remaining allegations are construed to be ones of fact, 3M admits that Minnesota Statute § 473.129, subd. 1, states that the Met Council has all powers that may be necessary or convenient to perform and carry out its duties and responsibilities in accordance with state and federal law. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 7 of the Complaint.

8. 3M denies the allegations contained in paragraph 8 of the Complaint.

9. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 9 of the Complaint and, on that basis, denies those allegations.

10. 3M admits the allegation contained in paragraph 10 of the Complaint.

11. 3M admits the allegations contained in the first sentence of paragraph 11 of the Complaint. As to the remaining allegations contained in paragraph 11 of the Complaint, 3M states that it lacks knowledge or information sufficient to form a belief as to the truth or falsity of those allegations and, on that basis, denies those allegations.

12. 3M admits the allegations contained in paragraph 12 of the Complaint.

13. 3M admits the allegations contained in the first sentence of paragraph 13 of the Complaint. 3M denies the allegations contained in the second sentence of paragraph 13 of the Complaint.

14. 3M denies the allegations contained in paragraph 14 of the Complaint.

15. 3M admits that the State of Minnesota has alleged certain causes of action against 3M relating to the presence of certain perfluorochemicals ("PFCs") in Minnesota's waters, and

states that the State of Minnesota's Amended Complaint speaks for itself. Except as expressly admitted herein, 3M denies all allegations contained in paragraph 15 of the Complaint.

16. 3M admits the allegations contained in paragraph 16 of the Complaint.

17. 3M admits that it entered into a Settlement Agreement and Consent Order with the MPCA in 2007. 3M states that the 2007 Settlement Agreement and Consent Order speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 17 of the Complaint.

18. 3M denies the allegations contained in paragraph 18 of the Complaint, except that 3M admits that a PFC called perfluorooctane sulfonate ("PFOS") may bioaccumulate in certain fish.

19. 3M denies the allegations contained in paragraph 19 of the Complaint.

20. 3M denies the allegations contained in the first sentence of paragraph 20 of the Complaint, except that 3M admits that in 2008 the MPCA listed Pool 2 of the Mississippi River as "impaired" for PFOS as well as other constituents. 3M states that the allegations contained in the second sentence of paragraph 20 are statements of law, to which no responsive pleading is required. To the extent a response is required, 3M states that Minnesota Rule 7050.0150 speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 20 of the Complaint.

21. 3M admits that the State of Minnesota has alleged certain causes of action against 3M relating to the presence of certain PFCs in Minnesota's waters. 3M states that the State of Minnesota's Amended Complaint speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 21 of the Complaint.

22. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in the first two sentences of paragraph 22 of the Complaint and, on that basis, denies those allegations. As to the allegations contained in the third sentence of paragraph 22 of the Complaint, 3M admits that the MPCA published a study in 2006 regarding the presence of PFCs in Minnesota waters. 3M states that the 2006 study speaks for itself.

23. 3M admits that the MPCA conducted a study in 2009 regarding the presence of certain PFCs in Pool 2 of the Mississippi River. 3M states that the 2009 study speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 23 of the Complaint.

24. 3M denies the allegations contained in the first three sentences of paragraph 24 of the Complaint. As to the allegations contained in the fourth sentence of paragraph 24, 3M admits that in 2008 the MPCA listed the entirety of Pool 2 of the Mississippi River as impaired due to the presence of PFOS.

25. 3M states that it lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 25 of the Complaint and, on that basis, denies those allegations.

26. 3M admits that the State of Minnesota has alleged certain causes of action against 3M relating to the presence of certain PFCs in Minnesota's waters. 3M states that the State of Minnesota's Amended Complaint speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 26 of the Complaint.

27. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegation contained in paragraph 27 of the Complaint and, on that basis, denies that allegation.

28. 3M admits the allegations contained in the first and fourth sentences of paragraph 28 of the Complaint. As to the allegations contained in the third sentence of paragraph 28, 3M admits that drinking water containing 300 parts per trillion or less of PFOS is not known to pose a health risk to humans. 3M, however, denies any allegation or implication that drinking water containing more than 300 parts per trillion of PFOS poses a health risk. 3M states that the second sentence of paragraph 28 is a statement of law, to which no responsive pleading is required. To the extent a response is required, or if the allegations contained in the second sentence are construed to be ones of fact, 3M states that Subdivision 3 of Minnesota Statute § 103H.005 defines Health Risk Limits ("HRLs"), and further that HRLs are determined by the application of Minnesota Rules 4717.7810 through 4717.7900. 3M states that Minnesota's Statutes and Rules relating to HRLs speak for themselves. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 28 of the Complaint.

29. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 29 of the Complaint and, on that basis, denies those allegations.

30. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in the first sentence of paragraph 30 of the Complaint and, on that basis, denies those allegations. 3M denies the allegations contained in the second sentence of paragraph 30.

31. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 31 of the Complaint and, on that basis, denies those allegations.

32. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in the first sentence of paragraph 32 of the Complaint and, on that basis, denies those allegations. 3M denies the allegations contained in the second sentence of paragraph 32.

33. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 33 of the Complaint and, on that basis, denies those allegations.

34. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 34 of the Complaint and, on that basis, denies those allegations.

35. 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of the allegations contained in paragraph 35 of the Complaint and, on that basis, denies those allegations.

36. 3M denies the allegations contained in paragraph 36 of the Complaint.

37. 3M re-alleges paragraphs 1-36 of this Answer as if fully set forth herein.

38. 3M states that paragraph 38 of the Complaint is a statement of law, to which no responsive pleading is required. To the extent that the statements contained in paragraph 38 are construed to be allegations of fact, 3M denies those allegations.

39. 3M alleges that paragraph 39 of the Complaint is a statement of law, to which no responsive pleading is required. To the extent that the statements contained in paragraph 39 are construed to be allegations of fact, 3M denies those allegations.

40. 3M denies the allegations contained in paragraph 40 of the Complaint.

41. 3M denies the allegations contained in paragraph 41 of the Complaint.

42. 3M denies the allegations contained in paragraph 42 of the Complaint.

43. 3M re-alleges paragraphs 1-42 of this Answer as if fully set forth herein.

44. The allegations contained in paragraph 44 of the Complaint are statements of law, to which no responsive pleading is required. To the extent a response is required, 3M states that Minnesota Statute § 116B.03 speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 44 of the Complaint.

45. 3M denies the allegations contained in paragraph 45 of the Complaint, except that 3M admits that Pool 2 of the Mississippi River is a natural resource as defined in Minnesota Statute § 116B.02, subd. 4.

46. The allegations contained in paragraph 46 of the Complaint are statements of the Met Council's intent. Accordingly, 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of those allegations and, on that basis, denies those allegations. 3M further states that the Complaint speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 46 of the Complaint.

47. 3M re-alleges paragraphs 1-46 of this Answer as if fully set forth herein.

48. 3M denies the allegations contained in paragraph 48 of the Complaint.

49. 3M denies the allegations contained in paragraph 49 of the Complaint.

50. 3M denies the allegations contained in paragraph 50 of the Complaint.

51. 3M denies the allegations contained in paragraph 51 of the Complaint.

52. The allegations contained in paragraph 52 of the Complaint are statements of the Met Council's intent. Accordingly, 3M lacks knowledge or information sufficient to form a belief as to the truth or falsity of those allegations and, on that basis, denies those allegations. 3M further states that the Complaint speaks for itself. Except as expressly admitted herein, 3M denies the allegations contained in paragraph 52 of the Complaint.

AFFIRMATIVE DEFENSES

53. The Complaint fails to state a claim upon which relief may be granted.

54. This Court lacks subject matter jurisdiction over Counts One and Three of the Complaint because those claims are not ripe.

55. The Met Council's claims are barred by Minnesota's contributory fault rules, Minnesota Statute § 604.01, subd. 1, because any increased restrictions on the Met Council's discharge of PFOS-containing wastewater are the consequence of the Met Council's acts or omissions.

56. All damages sought by the Met Council in the Complaint were, are, and will be the consequence of the Met Council's acts or omissions and, therefore, any damages awarded to the Met Council must be proportionally reduced with respect to the Met Council's acts or omissions pursuant to Minnesota Statute § 604.01, subd. 1.

57. The Met Council's claimed damages were caused or contributed to by third-parties over whom 3M had no control and no legal duty to control, including agencies of the State of Minnesota.

58. The Met Council's claims are barred in whole or in part because 3M's conduct was in accordance with all applicable standards of care under all laws, regulations, and industry

practice and knowledge at the relevant times, and the activities of 3M were in accordance with all such standards of care and were reasonable as a matter of law.

59. The Met Council's claims are barred to the extent that the State of Minnesota is asserting the same claims against 3M on behalf of the Met Council under the *parens patriae* doctrine.

60. The Met Council's claims are barred because federal, state, and local authorities authorized, ratified, or were aware of and acquiesced to the actions of 3M that are the subject of this action.

61. The Met Council's claims are barred because 3M's actions were in compliance with all applicable laws, regulations, and standards, and at all times 3M obtained the requisite permits with respect to its disposal of wastes.

62. The Met Council's claims are barred because 3M's actions were taken pursuant to permits issued by the applicable regulatory agencies including the Minnesota Pollution Control Agency and the Minnesota Department of Health, in accordance with Minnesota Statute § 116B.03, subd. 1.

63. Any claim made by the Met Council related to the alleged disposal by 3M of PFCs is barred by the Closed Landfill Act and by 3M's participation in the Closed Landfill Program.

64. The Met Council's claims are barred, in part, because 3M's actions were taken pursuant to permits, in accordance with Minnesota Statute § 115B.04, subd. 9.

65. The Met Council's claims are barred, in part, by intervening actions of the MPCA, in accordance with Minnesota Statute § 115B.04, subd. 8.

66. The Met Council's claims are barred, in part, by intervening actions of a third party, in accordance with Minnesota Statute § 115B.04, subd. 7.

67. The Met Council's claims are barred, in part, by Minnesota Statute § 115B.15.

68. The Met Council's claims are barred by principles of *res judicata*, collateral estoppel, claim splitting, and release.

69. The Met Council's damages, if any, are subject to equitable apportionment and allocation.

70. 3M is entitled to offset from the Met Council's alleged damages all amounts expended for remediation and treatment of any PFCs undertaken by 3M pursuant to the Settlement Agreement and Consent Order executed between 3M and the MPCA on May 22, 2007.

71. If 3M is liable to the State, the Met Council is jointly and severally liable to make any and all such payments awarded because the Met Council caused, or significantly contributed to, the presence of PFCs in the natural resources of the State.

72. The Met Council's claims are barred by the statutes of limitations and laches.

73. The Met Council's damages, if any, are barred because any such damages would be the result of a superseding or intervening cause(s) subsequent to 3M's alleged conduct—namely, imposition of certain restrictions by the State.

74. The Met Council has failed to join necessary and indispensable parties who have contributed, now contribute, or will contribute in the future to the presence of PFCs in Pool 2 of the Mississippi River.

75. 3M is entitled to an offset from the Met Council for the State's alleged damages because the Met Council caused, or significantly contributed to, the presence of PFCs in the natural resources of the State.

76. 3M reserves the right to supplement its Answer by adding any additional defenses made known to it in the course of discovery in this matter, and within the time frame prescribed by Minnesota law or any order of this Court.

COUNTERCLAIMS

77. Pursuant to Minnesota Rule of Civil Procedure 13, Defendant 3M Company ("3M") files its counterclaims against Plaintiff/Intervenor Metropolitan Council (the "Met Council"), on personal knowledge of its own actions and on information and belief as to all other matters, as follows:

A. Preliminary Statement

78. The State of Minnesota (the "State") initiated this action by asserting claims against 3M based on the erroneous assertion that certain PFCs are hazardous substances under Minnesota law. The State seeks to recover damages from 3M for injuries allegedly caused by PFCs to the State's natural resources, including groundwater, surface water, sediments, and aquatic life. The lack of merit to the State's claims is demonstrated by, among other things, the statement made on December 12, 2011, by the Minnesota Department of Health ("MDH") that "[p]ublished studies so far do not show clear evidence that PFCs increase risk of human disease." In fact, the conclusion of every credible scientific study on the effects of environmental exposure to PFCs is that there are no demonstrable adverse effects to human health from the exposure to PFCs present in the environment.

79. Decades of careful investigation, study, and analysis by 3M and others indicate that environmental exposure to PFCs such as PFOS and PFOA do not cause adverse health

effects to humans and have not caused injury to the natural resources of Minnesota. Nonetheless, 3M brings these counterclaims to ensure that the Met Council is held responsible for its own discharges of PFCs and in the unlikely event that the State prevails on its claims against 3M.

80. The Met Council operates seven wastewater treatment plants in Minnesota, four of which discharge PFCs directly into the Mississippi River, while the other three plants discharge PFCs into tributaries of the Mississippi River—namely, the Minnesota River and the St. Croix River. In addition, the Met Council disposes of sludge and biosolids containing PFCs that are generated from one or more of its wastewater treatment plants by, among other things, spreading them on agricultural lands or placing them in one or more landfills in Minnesota. PFCs in the sludge and biosolids potentially leach into the underlying soil and groundwater, and eventually into bodies of surface water such as rivers and lakes. Thus, the Met Council is actively contributing to the release of PFCs into various bodies of groundwater and surface water in Minnesota.

81. By its claims, the Met Council seeks to require 3M to pay the cost the Met Council may incur if it is required by the State to reduce its discharges of PFCs. In particular, the Met Council seeks to recover from 3M the cost to upgrade and operate its Metropolitan Wastewater Treatment Plant (the "Metro Plant"). As established herein, the Met Council should not only bear responsibility for reducing or eliminating its discharges of PFCs if required to do so by the State in the future, but should also contribute to any award granted to the State on its claims against 3M.

82. Specifically, 3M is entitled to contribution from the Met Council because the Met Council's discharges of PFCs have significantly contributed to the levels of PFCs found in the

environment in Minnesota, and thus to the alleged injuries for which the State seeks damages from 3M. In addition, the Met Council has taken limited action to address or manage its own admitted releases of PFCs into the environment within Minnesota. In sharp contrast to the Met Council's inaction, 3M has voluntarily invested considerable resources to remove PFCs from the environment. In fact, 3M's leadership in this regard dates back to 2000, when it announced that it would voluntarily cease manufacturing the PFOS-and PFOA-based compounds which tend to persist and bioaccumulate in this environment. The efforts undertaken by 3M have been praised by many, including the United States Environmental Protection Agency ("EPA") and have been extraordinarily successful. Indeed, recent studies show significant declines in the levels of PFCs such as PFOS and PFOA found in the environment of Minnesota.

B. **Parties**

83. Defendant/Counterclaim Plaintiff 3M is a Delaware corporation with its principal place of business located at the 3M Center, St. Paul, Minnesota.

84. Intervenor/Counterclaim Defendant the Met Council is a Minnesota non-profit corporation and political subdivision of the State of Minnesota, with its registered office and principal place of business located at 390 Robert Street North, St. Paul, Minnesota.

C. **Jurisdiction And Venue**

85. Pursuant to Minnesota Statutes §§ 542.02 and 542.11, this Court has jurisdiction over the subject matter of these Counterclaims.

86. This Court has personal jurisdiction over the Met Council because it has appeared in this action.

87. Pursuant to Minnesota Statute § 542.10, venue is proper in this Court because venue of the main action established venue over these Counterclaims, which are properly joined in this action.

D. Factual Background

1. 3M and its business

88. 3M was founded in 1902 by five businessmen hoping to capitalize on a mining mineral in Minnesota that could be used for grinding wheels. From those beginnings, 3M has grown to become the seventh largest private employer in Minnesota with over 15,000 employees. Still based in Minnesota, 3M had sales of $27 billion in 2010.

89. 3M produces thousands of distinct products which it sells in nearly 200 countries. It has more than 35 business units, organized into six business divisions. In particular, 3M competes in such varied product fields as health care, highway and transportation safety, office products, abrasives, electronics, and adhesives.

90. Among 3M's well known consumer products are Scotch® Magic™ Tape, Post-it® Notes, and Nexcare™ Adhesive Bandages.

91. The engine that drives 3M's long-term success is its commitment to innovation. In the early 1920s, 3M introduced the world's first waterproof sandpaper. In 1925, 3M invented masking tape—the first of many Scotch® brand adhesive tapes. After 3M invented Scotch® Cellophane Tape for sealing boxes, hundreds of additional uses were discovered. Thereafter, new products such as Scotchlite™ Reflective Sheeting for highway markings, magnetic sound recording tape, and offset printing plates were started. In the 1950s, 3M introduced the Thermo-Fax™ copying process and Scotch-Brite® Cleaning Pads. In the 1960s, 3M developed photographic products, carbonless papers, overhead projection systems, and a rapidly growing health care business of medical and dental products. In the 1970s and 1980s, 3M entered into the markets for pharmaceutical, radiology, and energy control products. In 1980, 3M introduced Post-it® Notes, which changed people's communication and organization behavior forever. In the 1990s, 3M continued to develop an array of innovative products, including immune response

modifier pharmaceuticals, brightness enhancement films for electronic displays, and flexible circuits used in inkjet printers, cell phones, and other electronic devices.

2. 3M: A leader on issues of corporate responsibility and environmental stewardship.

92. Throughout its history, 3M has maintained an unwavering commitment to act with honesty and integrity. Indeed, 3M has a storied history of corporate leadership in community affairs. From the earliest days, the leadership 3M has continually strived to address ongoing challenges with integrity and responsibility.

93. For example, in 1975, 3M introduced its Pollution Prevention Pays ("3P") initiative to prevent pollution at the source, in products, and in its manufacturing processes. Positive results are achieved in all of these areas through product reformulation, process modification, equipment redesign, and recycling of waste materials. Since 1975 more than three billion pounds of pollution have been eliminated through the implementation of 3P projects.

94. More recently, 3M and the 3M Foundation in 2010 alone donated approximately $59 million in cash and products to educational and charitable institutions. In addition, 3M has donated over $15 million to The Nature Conservancy and other environmental organizations to safeguard critical habitats, preserve biodiversity, and promote environmental education.

95. 3M actively promotes economic, social, and environmental sustainability. 3M's key sustainability objectives include: reducing its environmental footprint; developing solutions that address environmental and social challenges for its customers and society; assuring its products are safe for their intended use through their entire lifecycle; maintaining a safe and healthy workplace; providing a supportive, flexible work environment; supporting local needs and education in communities where 3M employees live and work; conducting its business with uncompromising honesty and integrity; and providing attractive returns for its investors.

96. 3M's sustainability vision is simple—to help meet the needs of society today while respecting the rights of future generations.

97. Given the above, it is not surprising that 3M is routinely commended for its commitment to the environment. For example, in 2011, 3M was: (1) ranked No. 2 on Interbrand's list of "Best Global Green Brands;" (2) recognized by the Dow Jones Sustainability Index as a leader in operational eco-efficiency, water-related risk management; and (3) recognized by the EPA Energy Star® program as a Sustained Excellence Leader for seven consecutive years.

3. <u>The development and evolution of fluorochemicals</u>

a. <u>PFCs enable numerous well known products.</u>

98. Since 1949, 3M has been a leader in the manufacture of certain organic fluorochemicals (*i.e.*, organic compounds where carbon is bonded to fluorine).

99. Organic compounds are carbon-based compounds, where carbon atoms are often bonded to hydrogen atoms. It is possible to substitute other elements such as nitrogen, oxygen, or fluorine for the hydrogen atoms. If at least one hydrogen atom is substituted with a fluorine atom, the resulting chemical is a "fluorochemical." If all of the hydrogen atoms bonded to carbon atoms within a compound are replaced with fluorine, that compound is fully fluorinated or "perfluorinated." Many of the compounds produced by 3M had a fully fluorinated carbon chain with the exception of a functional group (*e.g.*, carboxylate or sulfonate) at one end of the carbon chain which enabled further chemical reactions to occur. The term perfluorochemical ("PFC") has become commonly used to describe many of the fluorinated chemicals produced by 3M, irrespective of whether they are fully fluorinated or not. Thus, the general usage of the term PFC is not "technically" correct. Nonetheless, because of its common usage, it is used herein for convenience when referring to this group of chemistries.

100. There are literally hundreds of PFC compounds. A PFC compound may contain a shorter or longer carbon chain. For example, PFOS and PFOA have eight carbon atoms. PFOS is a sulfonate compound, and PFOA is a carboxylate compound. In contrast, PFBS (a sulfonate) and PFBA (a carboxylate) have only four carbon atoms. Some of 3M's current products are based on the four-carbon chain sulfonate (PFBS) chemistry.

101. PFCs have unique properties. For example, certain PFCs repel both oil and water. These properties make PFCs useful in a large number of applications. Certain PFCs have enabled the development and commercialization of products such as stain resistant carpets and fabrics and fire fighting foams. In fact, PFC compounds also have been used in the manufacture of such well-known brands as Teflon™, Stainmaster™, and GORE-TEX®.

b. 3M's commitment to the monitoring, management, ultimate safety, and reduction of PFCs in the environment

(i) Since the 1970s, 3M has monitored the health of those most exposed to certain PFCs—3M employees.

102. In 1968, academic researchers reported finding organic fluorine in human blood, but were unable to identify the compound(s). When research in the 1970s tentatively identified PFOA as at least a component of this organic fluorine, 3M promptly took steps to assess the safety of its employees who worked on the manufacture of fluorochemicals. 3M invested substantial time, money, and effort to develop improved methods for detecting and analyzing organic fluorine in blood. 3M committed fully to improving its industrial hygiene and waste management practices to minimize the exposure of its employees and the public at large to fluorochemicals.

103. Subsequently, 3M continued to monitor the health of its employees and published the results of its research. In addition to medical surveillance and epidemiological studies, 3M

performed numerous laboratory studies to further understand the potential biological effects of PFOA, PFOS, and other related chemicals.

(ii) PFCs such as PFOA and PFOS have not been found to cause adverse health effects in employees.

104. The studies of 3M employees demonstrate that exposure to PFCs such as PFOS and PFOA did not cause any observable adverse health effects. Mortality studies performed at 3M's primary manufacturing locations in the United States for PFOA- and PFOS-based chemistries showed no unexpected patterns of mortality attributable to exposure to those chemistries. The mortality studies – performed by university researchers under contract to 3M – continue to be improved and refined. The lack of observable adverse health effects in 3M employees is highly significant: (i) because those employees are potentially exposed to PFCs at higher levels than the general public; and (ii) because effects from chemical exposure are dose related, the lack of observable adverse health effects in the employee population offers great reassurance that there is no likelihood of harm to the general public.

105. 3M has regularly submitted the results of its studies to various regulators, including the EPA.

(iii) 3M finds low levels of PFOS in human blood samples.

106. Over the past four decades, 3M scientists have developed, validated, and published analytical methods for the detection and analysis of ever smaller quantities of PFCs such as PFOS and PFOA. As a result of 3M's efforts, by the late 1990s the ability to detect PFOS and PFOA in blood, animal tissue, and the environment advanced significantly. Those technological advancements led 3M to discover in 1997-98 the presence of very low-levels of PFOS (in the parts-per-billion) in the blood of the general population.

107. Data available at that time did not indicate that the low levels of PFOS found in human blood samples presented any health risk. 3M reported these findings to the EPA in May 1998, and contemporaneously briefed the Occupational Safety and Health Administration, the Consumer Product Safety Commission, and other agencies. Over the next two years, 3M and the EPA entered into an open dialogue regarding environmental exposure to PFOS. 3M provided the EPA with its data from various biomonitoring, epidemiological, toxicological, and other studies it had conducted on PFOS and, subsequently, on PFOA.

108. 3M also engaged in substantial efforts to further improve analytical methods to study PFCs, continue toxicologic and epidemiologic studies, reduce releases to the environment, and identify and eliminate the sources and pathways by which people could be exposed to PFCs such as PFOS and PFOA.

(iv) 3M voluntarily ceases production of PFOS and PFOA.

109. The slow rate at which PFOS and PFOA are eliminated by living organisms – coupled with their environmental persistence – led 3M to take steps to search for alternative chemistries. In addition, 3M continued efforts to identify and reduce the likelihood of exposure to PFOS and PFOA precursors (*i.e.*, chemicals that may be metabolized to PFOS and PFOA, respectively).

110. By 2000, 3M had succeeded in significantly reducing releases of PFCs from its manufacturing operations and improving the methods for detection of certain PFCs in the environment.

111. Although PFOS and PFOA had not been found to cause observable health effects at the blood concentrations seen either in the general population or at the higher concentrations found in 3M employees, in May 2000, 3M announced that it would voluntarily phase out the manufacturing of products based on perfluorooctanyl chemistries.

112. By 2002, 3M had voluntarily phased out the production of PFOS-and PFOA-based products in Minnesota, which were a significant source of revenue for the company. For example, among other products, 3M phased out Scotchgard™ fabric protector despite the potential loss of hundreds of millions of dollars in annual sales.

113. These efforts by 3M were widely applauded by regulators and environmental groups because they were undertaken voluntarily, not under mandate from any government agency. Indeed, the EPA lauded 3M for its proactive efforts. In fact, Carol M. Browner, the Administrator of the EPA at the time, noted in a press release, dated May 16, 2000, that: "Today's phaseout announcement by 3M will ensure that future exposure to these chemicals will be eliminated, and the public health and the environment will be protected . . . EPA will work with the company on the development of substitutes to ensure that those chemicals are safe for the environment. 3M deserves great credit for identifying this problem and coming forward voluntarily."

114. As a result of the phaseout, 3M completely vacated certain markets and product areas. For certain other products, 3M subsequently developed an alternative to its eight carbon chain PFOS-based chemistry—namely, one based on a four carbon chain chemistry called perfluorobutane sulfonate ("PFBS"). While it takes approximately four years for half of the PFOS in blood to clear from the human body (known as the "half-life" of the compound), PFBS has a half-life of forty days in human blood, making it significantly less likely to accumulate to measurable levels. As a result, the potential for bioaccumulation was significantly reduced.

115. A number of 3M's domestic and international competitors, however, continue to make, use, and sell perfluorooctanyl-based products (*i.e.*, eight carbon chain PFCs such as PFOA) in the United States and elsewhere.

(v) **3M has continuously worked with various state and federal regulatory agencies to investigate the environmental impact of certain PFCs and eliminate those compounds from the environment.**

116. 3M produced a range of products based on the PFOS and PFOA chemistries at its Cottage Grove facility beginning in the 1950s until 2002, when it completed its phase out of those chemistries at this site. From the late 1950s until 1971, 3M disposed of various industrial wastes, including waste containing PFC precursors, on-site at the Cottage Grove facility and at other disposal sites including the Oakdale landfill, the Woodbury landfill, and the Washington County landfill, located in Washington County. 3M's waste disposal practices were in compliance with all contemporaneously applicable laws and regulations, and met or exceeded industry practices.

117. Consistent with its commitment to environmental stewardship, since the 1980s, 3M has worked in cooperation with federal, state, and local authorities to investigate and remediate the Cottage Grove facility, Woodbury landfill, and Oakdale landfill (together, the "Sites").

118. For example, since September 2001, 3M has tested water for PFCs prior to its discharge from the Cottage Grove facility. Monthly sampling results have been submitted to the MPCA since February 2003 in accordance with the requirements of 3M's National Pollution Discharge Elimination System ("NPDES") Permit No. MN0001449.

119. Moreover, when 3M discovered in 2004 that drinking water in certain parts of Washington County contained trace amounts of certain PFCs, it took action immediately. For example, 3M informed the MPCA of its findings and initiated, in conjunction with the MCPA, a comprehensive investigation to determine the nature and extent of the presence of PFCs in

groundwater, surface water, sediments, and soils in certain parts of Washington County, including the Woodbury and Oakdale sites.

120. As a result of the foregoing efforts and others, in March 2007 the MPCA acknowledged that 3M had conducted a significant amount of investigatory work on PFCs, and had taken a number of actions to respond to their releases.

121. Thereafter, 3M entered into a Settlement Agreement and Consent Order (the "2007 Agreement") with the MPCA on May 22, 2007, which formalized 3M's commitment to assess and reduce the presence and release of PFCs at the Sites.

122. In particular, 3M agreed to, among other things: (1) investigate and characterize the releases or threatened releases of certain PFCs from the Sites; (2) undertake to reduce or eliminate PFCs in the soil or ground water at the Sites; (3) allocate $8 million to implement remedial actions at the Washington County Landfill site; (4) provide alternative drinking water to residents in the vicinity of the Sites if a Health Based Value ("HBV") or Health Risk Limit ("HRL") was exceeded for any PFC at issue as a result of 3M's disposal; and (5) allocate $5 million to fund research related to the presence of PFCs in Minnesota's ambient environment. Thus, 3M voluntarily committed to expending considerable amounts of time, money, and effort to address the presence of PFCs in the environment that resulted from the Sites.

(vi) **By any standard, 3M's remediation efforts have been tremendously successful.**

123. 3M has complied fully and completely with its obligations under the 2007 Agreement.

124. To date, 3M has expended approximately $100 million on various environmental remediation efforts, grants, scientific studies, and water supply and filtration systems for municipalities and residents throughout Washington County, including but not limited to, the

Cottage Grove facility, the Woodbury landfill, the Oakdale landfill, the City of Oakdale, the City of Lake Elmo, and certain residential areas in the vicinity of the foregoing locations.

125. 3M has expended considerable resources and efforts to contain and remove PFCs from the soil and water. For example, 3M has removed tons of soil containing PFCs from each of the three Sites addressed under the 2007 Agreement; installed a multi-phased wastewater treatment plant that, among other things, significantly reduces the amount of PFCs that is discharged into the Mississippi River under 3M's Cottage Grove NPDES permit; expanded a pump-out well system at the Oakdale site, which continuously captures groundwater underneath the landfill, to prevent the off-site migration of PFCs and to allow the water to be treated using a GAC filtration system that removes PFCs.

126. In essence, 3M's remaining remediation activities are focused on the capture and treatment of groundwater from the Woodbury landfill and the Cottage Grove facility. Toward that end, in March 2010, 3M submitted an action plan to the State to perform a several month "pump test" at the Cottage Grove facility in order to properly design the well network needed to capture impacted groundwater at the facility. The new groundwater treatment system associated with this extraction well will allow 3M to treat the groundwater from the Cottage Grove facility and the water pumped out from the Woodbury landfill, and thereby further reduce the amount of PFCs discharged into the Mississippi River. Implementation of the plan, however, has been delayed by the State's refusal to renew 3M's NPDES permit. In other words, the State has hindered 3M from further reducing the amount of PFCs discharged into the environment.

127. Nonetheless, 3M's efforts have been extremely successful. In fact, due in part to 3M's remediation efforts, the levels of PFCs in the environment in the south Washington County area have declined significantly over the past few years. For example, a biomonitoring study

announced by the MDH on December 6, 2011, indicated that levels of PFCs found in the blood of East Metro area residents were significantly lower compared to levels in 2009. In fact, the study found that individual levels of PFOS had declined by 26 percent, and individual levels of PFOA had declined by 21 percent. Indeed, the MDH recognized that the results of the study were a "major" development, and that the work related to reducing or eliminating PFCs from the environment was almost entirely funded by 3M.

128. In 2011, 3M conducted a comprehensive study of PFOS concentrations in fish tissue in Pool 2 of the upper Mississippi River—a thirty-three mile stretch of the Mississippi River between the Ford Dam (near St. Paul, Minnesota) and the Hastings Dam (near Hastings, Minnesota). This study indicates that PFOS levels in fish in Pool 2 have declined dramatically from the levels observed in a study conducted by the State in 2009. Specifically, PFOS levels in the freshwater drum fish were found to be 46 ng/g, well below the over 200 ng/g level reported in 2009. Based in part on the results of the study conducted by the State, the MDH on December 6, 2009, issued a one-meal-per-month fish advisory for the freshwater drum for having elevated PFOS tissue concentrations. In addition, the MPCA retained its listing of Pool 2 as "impaired" for PFOS. The recent study, however, demonstrates that Pool 2 is not "impaired" for PFOS—an average tissue concentration above 200 ng/g is essentially the threshold for listing a given body of water as "impaired."

129. The foregoing studies, among other things, demonstrate that the levels of PFCs in the environment and exposure to humans in the vicinity of the Sites and Pool 2 have declined significantly. This is due, in part, to 3M's efforts to identify and eliminate the sources of PFCs to the environment.

4. The Met Council admittedly discharges significant amounts of PFCs into the environment.

130. The Met Council serves as the regional planning agency for seven counties in the St. Paul and Minneapolis metropolitan areas (the "Metropolitan Area"). Its responsibilities include, among other things, the processing, treatment, and discharge of wastewater collected from the approximately 1.8 million residents and approximately 800 industries located within the Metropolitan Area.

131. The Met Council processes an average of two hundred and sixty million (260,000,000) gallons of wastewater each day at the seven wastewater treatment plants ("WWTPs").

132. Those seven WWTPs are: (i) Blue Lake WWTP, located in Shakopee, Minnesota; (ii) Eagle's Point WWTP, located in Cottage Grove, Minnesota; (iii) Empire WWTP, located in Empire Township, Minnesota; (iv) Hastings WWTP, located in Hastings, Minnesota; (v) Metro WWTP, located in St. Paul, Minnesota; (vi) Seneca WWTP, located in Eagen, Minnesota; and (vii) St. Croix Valley WWTP, located in Oak Park Heights, Minnesota (collectively, the "Met Council WWTPs").

a. The Met Council discharges PFCs directly into the Mississippi River and its tributaries.

133. By its own admission, the Met Council discharges PFCs, including PFOS, from its Metro Plant into Pool 2 of the Mississippi River on a daily basis.

134. In fact, four of Met Council's seven wastewater treatment plants discharge PFCs directly into the Mississippi River—namely, the Metro WWTP, Eagle's Point WWTP, Empire WWTP, and the Hastings WWTP.

135. The other three plants discharge PFCs into tributaries of the Mississippi River—namely, the Minnesota River and the St. Croix River. In particular, the Blue Lake WWTP and