Submission No 49

INQUIRY INTO INQUIRY INTO PFAS CONTAMINATION IN WATERWAYS AND DRINKING WATER SUPPLIES THROUGHOUT NEW SOUTH WALES

Organisation: 3M Australia

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3M Australia Pty Ltd Submission

This submission is made by 3M Australia Pty Ltd (3M Australia) to the Senate Select Committee on PFAS (Committee).

1 Introduction

1.1 3M Australia welcomes the opportunity to make this submission to the Committee, recognising the important matters it intends to address in its Terms of Reference. 3M Australia and its corporate parent, 3M Company, are committed to continuing to work collaboratively to find new and better ways to use science and technology to answer questions related to per- and polyfluoroalkyl substances (PFAS) management. These are complex topics grounded in decades of research, and the discussion continues to evolve. All stakeholders – including the communities where we operate, our employees, and our customers – benefit from continued scientific progress.

1.2 To assist the Committee in understanding the history and current status of the market for PFAS in Australia, 3M Australia notes the following:

(a) 3M Australia does not manufacture PFAS and never has.

(b) 3M Company, 3M Australia's corporate parent, has led industry in exiting from PFAS. In 2000, 3M Company announced that it would cease manufacturing and using PFOS, PFOA, and other long chain PFAS (the types of PFAS that have generated the most attention). As part of this global phaseout, 3M Australia followed the lead of its corporate parent and ceased importing and distributing aqueous film-forming foam (AFFF) and other products containing PFOS, PFOA, as well as other long chain PFAS. 3M Australia has not been in the market for those products since that long-ago exit.

(c) In the years following 3M Company's exit, other suppliers increased their manufacturing and sale of AFFF into Australia, as well as of other products containing long chain PFAS. And other users in Australia, including the Department of Defence, continued to use these products.

(d) In 2022, 3M Company announced that it would exit manufacturing all PFAS by the end of 2025 and is on schedule to do so. 3M Company also announced that it would work to discontinue the use of PFAS across its product portfolio. Once again, 3M Company was an industry leader in taking this action. And, again, 3M Australia is following its corporate parent's lead.

2 3M Australia

2.1 3M Australia has a long, proud history. It was founded in 1951, in two small barn-like buildings on the outskirts of Lidcombe (NSW) and has carried on business in all states and territories throughout Australia for nearly three-quarters of a century. Today, it employs approximately 350 people across the country. Over its extended time here, it has employed thousands of Australians while supplying a wide range of market-leading, science-based products to the Australian market. 3M Australia's products have been at the forefront of many sectors of significant importance to Australian society, including healthcare, transportation, medicines, adhesives, filtration, green technologies and safety equipment.

2.2 Details on 3M Australia's current product range can be found at: https://www.3m.com.au/3M/en_AU/p/.

2.3 3M Australia currently has only one Australian manufacturing site located in Smithfield (NSW). It manufactures personal protective equipment. As noted, 3M Australia does not manufacture PFAS and never has.

3 PFAS

3.1 The term “PFAS” refers to a broad category of thousands of compounds with distinct and widely varying properties and characteristics. They are used in everyday applications to promote durability, water resistance, and many other qualities essential to modern society. Many companies have historically manufactured PFAS over the years and continue to do so and import those products in Australia even after 3M Company’s and 3M Australia’s phaseouts described above.

3.2 AFFF is among the most significant PFAS applications. AFFF’s history dates back many decades. It was developed by the United States (U.S.) Navy in collaboration with industry in the early 1960s. In 1967, a highly-publicised fuel fire on the U.S. Navy’s aircraft carrier *USS Forrestal* resulted in 134 deaths and injuries to 161 other servicemembers. The destruction was devastating because the fire, which started when a rocket misfired and ruptured an airplane’s fuel tank, triggered a conflagration that burned for hours. In response, the U.S. Navy promoted the deployment of AFFF, which was and is the most effective product available for suppressing fires caused by jet fuel. The U.S. Department of Defence eventually put AFFF to work in more than 8,000 facilities and mobile assets in the U.S. and across the globe. Fluorocarbon surfactants had been a key part of the U.S. military specifications for firefighting foam for decades.

3.3 In addition to its use in AFFF, PFAS is found in a wide range of products manufactured and sold in Australia by multiple companies in a huge number of industries. Some products essential to society, like semiconductors used in modern electronics, currently cannot be made without use of PFAS. Likewise, PFAS chemistries are essential to products that are core to the energy transition, such as lithium-ion batteries, electric vehicles and wind turbines. They are also found or used in lifesaving products such as healthcare devices, prescription medicines and safety equipment, as well as in automobiles, aeroplanes and smartphones. In many of these applications, there currently are no alternatives to PFAS available.

3.4 PFAS in the environment comes from many sources, from many products, and from many applications. The challenges posed by PFAS management and substitution are complex and nuanced, as are the solutions to those challenges given the essentiality of many of its uses to modern society.

4 3M Australia & PFAS

4.1 As noted, 3M Australia does not manufacture PFAS and never has.

4.2 3M Australia historically received, mixed, assembled, repackaged, and tested long chain PFAS products at a site in St. Mary’s (NSW), but has not done so since 2005.

4.3 More than 20 years ago, 3M Australia sold AFFF, directly and through distributors, including to the Department of Defence, Airservices Australia, and to other airport operators, shipping companies, mining, energy, and industrial companies, and firefighting authorities. 3M Australia stopped selling AFFF in 2005.

4.4 The Department of Defence required all AFFF products, including 3M Australia’s, to comply with strict specifications set by the Department and 3M Australia supplied AFFF in compliance with the Department’s explicit requirements. Under those specifications, the required chemical and physical properties could be met only with fluorochemical surfactants and, in particular, Australian Defence Standard DEF(AUST) fire foam liquid, fire extinguishing aqueous film-forming foam. The Department of Defence conducted laboratory tests on 3M’s AFFF product to ensure compliance with its specifications and further required 3M Australia to demonstrate the effectiveness of its product through controlled burns. To be clear, these were mandates imposed by the Department and not 3M Australia.

4.5 In part to comply with Department of Defence requirements, 3M Australia conducted testing and demonstrations of PFAS-containing firefighting foam in the 1980s and 1990s at a leased site at Brogan's Creek (NSW). Discussions with the NSW EPA with respect to the investigation and possible remediation at the Brogan's Creek site have commenced.

4.6 In addition to AFFF, prior to the 2000 phaseout described above, 3M Australia sold other products containing PFOS and PFOA in the Australian market, including prior formulations of Scotchgard and ScotchBan. In the years immediately preceding the phaseout, sales of PFOS, PFOA, or other long chain PFAS-containing products represented a very low single-digit part of 3M Australia's overall sales.

5 3M Company Phases Out of PFAS

5.1 On 16 May 2000, 3M Company was the first company in the industry to announce that it would voluntarily exit the production and use of PFOS, PFOA, and other long chain PFAS chemistries worldwide.[1]

5.2 That decision, and the reasoning behind it, was widely disseminated globally, including in Australia. Notably, the U.S. Environmental Protection Agency (U.S. EPA) formally notified OECD governments, including the Australian government, of 3M's decision. Specifically, on 16 May 2000, the U.S. EPA communicated with Environment Australia and WorkSafe specifically about 3M's decision. U.S. EPA attached 3M's announcement to that communication, which stated: "*Sophisticated testing capabilities—some developed in only the last few years—show that this persistent compound, like other materials in the environment, can be detected broadly at extremely low levels in the environment and in people. All existing scientific knowledge indicates that the presence of these materials at these very low levels does not pose a human health or environmental risk."*

5.3 3M Australia also engaged extensively with the Australian government's National Industrial Chemicals Notification and Assessment Scheme (NICNAS) following the phaseout, including with regard to the status of the phaseout, affected products, and the timeline to complete the phaseout.

5.4 As part of its 2000 PFOS and PFOA exit, 3M Company ceased manufacturing fluorinated-AFFF including those that contained PFOS, PFOA, as well as other long chain PFAS. Others in the industry continued to supply that product to customers in Australia, including to the Department of Defence.

5.5 Similarly, with respect to other products containing long chain PFAS, when 3M exited from those markets in 2000, other companies began increasing production of those chemicals and continued supplying them to the Australian market.

5.6 On 20 December 2022, 3M Company announced that it would voluntarily exit the manufacture of all PFAS chemicals worldwide by the end of 2025 and is on schedule to do so. 3M Company also announced that it would work to discontinue the use of PFAS across its product portfolio, including Australia.[2]

6 Concluding statement

6.1 3M Australia supports regulation and governmental action that is science-based and scientists around the world are working on solutions and alternatives to the challenges that PFAS poses. 3M Australia appreciates that the Committee's work provides valuable contributions to the same, including by addressing Indigenous community concerns.

[1] Annexure A.
[2] Annexure B.

6.2 3M Australia is pleased to have had the opportunity to engage with the Australian Government on this matter.