

Appendix A: PFAS Contamination Response Protocol

National Framework for Responding to PFAS Contamination

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Purpose of this document

The PFAS Contamination Response Protocol (Protocol) is a quick-reference tool to help governments work together to respond rapidly, effectively and consistently to PFAS contamination. It outlines information about government roles and processes, and links to more detailed guidance materials. It also provides clear information to communities and industry on what they can expect from governments in Australia on PFAS contamination. For the purposes of this Protocol, 'PFAS' is taken to mean PFAS of concern, which at the time of publication are predominantly perfluorooctane sulfonate, also known as perfluorooctane sulfonic acid (PFOS); perfluorooctanoic acid (PFOA) and perfluorohexane sulfonic acid (PFHxS).

The widespread use of PFAS and mobility of these chemicals in the environment means that clearly determining all sources can be very challenging. Additionally, PFAS contamination may cross jurisdictional boundaries and there are often multiple entities involved. Working together to quickly take action is the best way to overcome these challenges and protect the environment and, as a precaution, human health.

Scope of this document

This document outlines agreed key priorities and guidance for governments in Australia when responding to PFAS contamination. It covers PFAS contamination on government-owned sites and other sites where government activities have resulted in PFAS contamination. The guidance is applicable to both loss of containment events (e.g. spills) and legacy contamination.

The Protocol does:

- Outline governments' priorities for responding to PFAS contamination.
- Identify and build on existing guidance material that can assist when responding to PFAS contamination.
- Provide guidance on how governments can work together to determine roles and respond to contamination consistently, particularly where multiple entities and/or jurisdictions are involved.
- Give examples of how governments in Australia may work together to manage risks arising from PFAS contamination.

The Protocol does not:

- Override any existing legislation, agreements or other guidance, or exempt governments from any usual obligations.
- Provide a set of sequential steps to respond to specific instances of PFAS contamination.
- Extensively cover guidance for environmental regulators. More detail can be found in the PFAS National Environmental Management Plan (Appendix B to the National Framework for Responding to PFAS Contamination).
- Create new obligations for non-government entities.

How to use this document

Priorities

This document outlines three priorities for responding to PFAS contamination. These priorities are of equal importance and should be considered simultaneously. Each is described in more detail below.

Engage with stakeholders

Timely, open, transparent and consistent communication is essential to share information, address concerns, explain actions, and advise on risk management actions. This should be undertaken in accordance with the PFAS Information Sharing, Communication and Engagement Guidelines (Appendix C to the National Framework for Responding to PFAS Contamination).

Identify and investigate sites

Sites may have become contaminated with PFAS through current or historic use, testing, storage or disposal of products containing PFAS. Potentially contaminated sites should be prioritised and investigated in accordance with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (ASC NEPM), state and territory regulatory systems for contaminated sites, and the PFAS National Environmental Management Plan (PFAS NEMP) (Appendix B to the National Framework for Responding to PFAS Contamination).

The ASC NEPM investigation process is iterative and includes:

- A preliminary assessment, which involves inspecting and identifying the characteristics of the site, including potential on and off-site sources and receptors, and
- Where appropriate, a detailed assessment, which usually includes assessment of potential risks to human health and the environment.

Manage risks

Risk management responses will vary depending on a range of factors, including technical considerations, community needs, financial and logistical feasibility, and the need for ongoing provision of critical public services. Any response should be tailored for individual circumstances, based on evidence, and commensurate with the level of risk.

Responses can be categorised as source management, pathway management or receptor management. Generally, source management is preferable to pathway management, and pathway management is preferable to receptor management. Examples of risk management responses are at **Attachment A**.

Phases

This document refers to the two phases of a response; the immediate response and ongoing response. For each phase, and each priority, the protocol provides information on the steps that should be undertaken, gives guidance on roles, and describes how governments can work together.

Guidance

In addition to the guidance outlined within, this document identifies other documents that governments may refer to during a PFAS contamination response. The documents are listed at **Attachment B**.

Definitions

In this document:

Entities are agencies, organisations, businesses and similar bodies. They can be government or non-government.

Government includes the Australian Government, state and territory governments, local governments, statutory authorities and other bodies created by legislation.

Entities

Known or potential polluters

Entities that have or may have contributed to PFAS contamination at a given site through PFAS-related activities. This may include government agencies.

Government land owners and lessees

Entities that own or lease government land and have obligations, either through ownership or under a lease agreement. They may or may not also be a known or potential polluter.

Owners and lessees may need to undertake additional responsibilities where known or potential polluters cannot be identified or do not fulfil their obligations.

Environmental regulators

Government agencies that have regulatory functions in relation to environmental contamination.

- On state and territory land (including local government sites), environment regulators are environment departments and EPAs.
- On Commonwealth land, the environmental regulatory function depends on which agency is responsible for the land.
 - The Department of the Environment and Energy is responsible for the protection of matters of national environmental significance as defined in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).
 - The Department of Infrastructure, Transport, Cities and Regional Development is responsible for the regulation of environmental protection at federally leased airports.
 - The Department of Defence is responsible for environmental management on Defence land.

Environmental regulators should be approached, in the first instance, when a response to PFAS contamination is not progressing in accordance with the Protocol.

Health, food, primary industry and agriculture agencies

Government agencies that provide expert advice on human health, food, agriculture and trade matters. These departments may also have regulatory functions in these areas.

First Minister(s) departments

Government agencies that support and advise First Ministers in each jurisdiction (i.e. the Prime Minister, State Premiers, and Territory Chief Ministers).

These agencies monitor and, where necessary, coordinate relevant agencies in managing PFAS contamination. They also work with other jurisdictions to facilitate consistency.

The protocol

Immediate response

Parties involved:	 Engage with stakeholders	 Identify and investigate sites	 Manage risks
Known or potential polluters	Undertake prompt, open and transparent stakeholder engagement about responding to PFAS contamination. Share information and data about next steps.	Identify sites where the entity may have used PFAS. Notify environmental regulator(s) where there is potential for PFAS contamination (see Attachment C).	Conduct activities as appropriate to manage any risks identified, in consultation with environmental regulator(s).
Government land owners and lessees	Work with known or potential polluters on any owned or leased sites to co-ordinate stakeholder engagement and information sharing activities.	Identify known or potential polluters who have been active on any owned or leased sites. Oversee and co-ordinate activities of known or potential polluters.	Oversee and co-ordinate activities of known or potential polluters.
Environmental regulators	Oversee the actions of, and provide advice to, entities undertaking investigations and management activities. Provide advice on regulatory activities and possible environmental impacts as appropriate. Where necessary, coordinate regulatory and compliance actions.		
Health, food, primary industry and agriculture agencies	Provide advice and support on relevant matters, in consultation with environmental regulator(s). Where necessary, coordinate regulatory and compliance actions.		
First Minister(s) departments	Monitor and, where necessary, coordinate relevant agencies in managing PFAS contamination. Work with other jurisdictions to facilitate consistency.		

Ongoing response

Parties Involved:	 Engage with stakeholders	 Identify and investigate sites	 Manage risks
Known or potential polluters	Undertake prompt, open and transparent stakeholder engagement about responding to PFAS contamination. Share information and data about next steps.	Conduct investigations and assess risks, in consultation with environmental regulator(s).	Conduct activities as appropriate to manage any risks identified, in consultation with environmental regulator(s).
Government land owners and lessees	Work with known or potential polluters on any owned or leased sites to co-ordinate stakeholder engagement and information sharing activities.	Oversee and co-ordinate activities of known or potential polluters.	Oversee and co-ordinate activities of known or potential polluters.
Environmental regulators	Oversee the actions of, and provide advice to, entities undertaking investigations and management activities. Provide advice on regulatory activities and possible environmental impacts as appropriate. Where necessary, coordinate regulatory and compliance actions.		
Health, food, primary industry and agriculture agencies	Provide advice and support on relevant matters, in consultation with environmental regulator(s). Where necessary, coordinate regulatory and compliance actions.		
First Minister(s) departments	Monitor and, where necessary, coordinate relevant agencies in managing PFAS contamination. Work with other jurisdictions to facilitate consistency.		

Attachment A: Examples of risk management measures

Source management

Measures that may remove the source of contamination. These could include, but are not limited to:

- Substituting products containing PFAS (particularly PFOS, PFOA or PFHxS) with alternative products, ensuring alternative products meet the requirements of relevant international conventions and relevant guidance.
- Decontaminating or replacing contaminated infrastructure.
- Containing and preventing run-off from sites where PFAS-containing products are, or have been, used.
- Disposing of PFAS stocks, or waste/infrastructure contaminated by PFAS with consideration of:
 - availability of disposal sites and technologies
 - guidance from the relevant state/territory regulator responsible for environmental protection, including in relation to transport and disposal
 - the [Stockholm Convention on Persistent Organic Pollutants](#)
 - the [Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal](#).

Pathway management

Measures that may prevent the contamination reaching an exposure pathway. These could include, but are not limited to:

- Immobilising the contaminant to prevent migration or leaching.
- Storing contaminated soil or other material in a contained facility.
- Treating water and/or soil.
- Capping groundwater bores.

Receptor management

Measures focussed on the receptor of the contamination (people such as those in surrounding communities, and the environment), where harm may occur. These could include, but are not limited to:

- Providing information and advice to people about how to reduce exposure pathways and risks associated with exposure to PFAS.
- Providing food advisories to people likely to consume commodities produced on PFAS contaminated land or water.
- Providing alternative drinking water for a specified period of time to people whose drinking water source consistently exceeds the guideline value for PFAS, where the guideline value has been determined.
 - Drinking water guideline values for PFOS, PFHxS and PFOA are provided in the *Australian Drinking Water Guidelines* (2011), National Health and Medical Research Council.
- Restricting animal access to contaminated land or water.

Attachment B: Guidance Documents

Guidance document	Relevant priorities		
	 Engage with stakeholders	 Identify and investigate sites	 Manage risks
Appendices to the National Framework for Responding to PFAS Contamination			
Appendix B: The PFAS National Environmental Management Plan	–	Yes	Yes
Appendix C: PFAS Information Sharing, Communication and Engagement Guidelines	Yes	–	–
Appendix E: Health Based Guidance Values for PFAS for use in site investigations in Australia	–	Yes	–
Appendix F: enHealth Guidance Statements on PFAS	Yes	Yes	Yes
Appendix G: Australian Health Protection Principal Committee PFAS Factsheet	Yes	–	Yes
Appendix H: Food Regulation Standing Committee Statement PFAS and the general food supply	–	Yes	Yes
Additional guidance on environmental health			
The enHealth Environmental Health Risk Assessment guidelines for assessing human health risks from environmental hazards and Australian Exposure Factor Guide (2012)	–	Yes	–
Additional guidance on environmental protection			
The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)	Yes	Yes	–
Additional guidance on food			
The Food Regulation Agreement (2008)	–	Yes	Yes
Additional guidance on chemicals management			
The <i>Industrial Chemicals (Notification and Assessment) Act 1989</i> and the <i>Industrial Chemicals Act 2019</i>	–	–	Yes
The NICNAS assessments on PFAS	Yes	Yes	Yes

Guidance document	Relevant priorities		
	 Engage with stakeholders	 Identify and investigate sites	 Manage risks
Additional guidance on contaminated sites			
<i>National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM)</i>	Yes	Yes	Yes
Additional guidance on waste management			
The National Waste Policy	Yes	Yes	Yes
Additional guidance on water standards			
The National Water Quality Management Strategy, including: The Australian Drinking Water Guidelines The Australian and New Zealand Guidelines for Fresh and Marine Water Quality The Australian Guidelines for Water Quality Monitoring and Reporting The Australian Guidelines for Water Recycling The Guidelines for Managing Risks in Recreational Water The Guidelines for Groundwater Quality Protection in Australia.	Yes	Yes	Yes
Additional guidance on community engagement			
enHealth Community Engagement Handbook for Responding to Environmental Health Incidents	Yes	–	–

Attachment C: Contact list for environmental regulators

Australian Capital Territory

Pollution Hotline 13 22 81

Commonwealth

Department of Defence 1300 333 362

Department of Infrastructure, Transport, Regional Development and Cities 1800 075 001

Department of the Environment and Energy 1800 803 772

New South Wales

Environment Line 131 555

Northern Territory

Pollution Hotline 1800 064 567

Queensland

Pollution Hotline 1300 130 372

South Australia

Pollution and Environment Incident Reporting Hotline (metro callers) (08) 8204 2004

Pollution and Environment Incident Reporting Hotline (non-metro callers) 1800 623 445

Tasmania

Pollution Incidents and Complaints Hotline 1800 005 171

Victoria

Pollution Hotline 1300 372 842

Western Australia

Pollution Watch Hotline 1300 784 782