Waipapa Taumata Rau University of Auckland

Chemical Risk Management Protocol

Safe Methods of Use (SMOU)

Persistent Organic Pollutants

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Version: 1.0
Issue Date: Dec 2025

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1 Purpose

This Safe Method of Use (SMOU) applies to principal investigators, and all staff and students who direct or participate in the use of Persistent Organic Pollutants (POPs) at the University of Auckland.

2 Disclaimer

POPs are typically toxic and may have present additional hazard properties. Please read this SMOU in conjunction with the Chemical Risk Management Guidelines and other relevant SMOUs as needed to ensure these risks are managed appropriately.

The Safety Data Sheet (SDS) should be consulted for specific information about the chemical you will be using. The Gold FFX SDS Database is available on the Library database. Instructions on how to source this information can be found on the Health, Safety and Wellbeing Databases website:

https://www.auckland.ac.nz/en/health-safety-wellbeing/health-safety-topics/laboratory-safety/chemical-safety/databases.html

3 Definitions

Approval: An approval granted by the EPA to import or manufacture a hazardous substance in containment under Section 31 of the Hazardous Substances and New Organisms Act 1996 for Research and development and analytical standards – persistent organic pollutants

Chemical Owner: Person with ownership and responsibility for the chemical.

EPA: Environmental Protection Authority

HCM: Hazards and Containment Manager or their delegate

POPs: Persistent Organic Pollutants under New Zealand legislation are those that are listed in Schedule 2A of the HSNO Act 1996.

4 Application

Persistent Organic Pollutants (POPs) under New Zealand legislation are those that are listed in Schedule 2A of the HSNO Act 1996.

Examples include:

- PFOS (perfluorooctanesulfonic acid), PFOA, PFHxS
- Hexachlorobenzene
- Pentachlorophenol
- Endosulfan
- DDT

5 Responsibility

5.1 The **Chemical Owner** is responsible for ensuring all work using or storing POPs in the University is compliant with the conditions of the approval and this document. This includes:

a) POPs to be used/stored must be specifically listed on the approval before acquisition.

b) Quantities of POPs imported/held must not exceed maximum quantities listed on the approval (as agreed at the time of application).

c) Conducting a risk assessment for use of POPs in their research and ensuring controls are implemented and monitored.

d) Ensuring storage, disposal, transfer and record-keeping of POPs meet the requirements listed in this document.

5.2 The **HCM** is responsible for:

a) Applying for and maintaining the relevant licence.

b) Approving purchases of POPs (Persistent Organic Pollutants).

c) Notifying the EPA once they are made aware of:

- Imports of POPs.

- When work involving a POP is completed.
- Any breaches of conditions.

d) Approving transfers or disposals of POPs.

e) Conducting an annual compliance check to ensure POPs use meets approval requirements.

6 Approval (Licencing) Process

An approval usually lasts 3 years. The Hazards and Containment Team is to co-ordinate the application and/or renewal of any POPs licence. Applications must be submitted at least 30 working days prior to approval expiry.

6.1 POPs may only be imported, stored, and/or used by obtaining a specific approval from the Environmental Protection Authority.

6.2 All work using or storing POPs in the University must be compliant with the terms of the approval. This includes:

a) POPs to be used/stored must be specifically listed on the approval

b) Quantities of POPs imported/held must not exceed maximum quantities listed on the approval

c) Complying with the conditions specified on the approval.

The University's approval, unless otherwise specified, only covers use of POPs as analytical standards or for research in a laboratory.

7 Import

7.1 All POPs purchases must have approval prior to purchasing, by the Hazards and Containment Manager.

7.2 Imports of POPs require notification to the EPA. This is done by the HCM.

8 Transport and Transfer

8.1 UOA shall not sell, gift or otherwise transfer the substance to another laboratory that does not have an approval under section 32 of the Act for those substances; and, unless otherwise authorised by the EPA, shall not transfer the substance to any other person unless such transfer is for the purpose of environmentally sound disposal.

8.2 Approval must be obtained from the Hazards and Containment Manager before moving POPs out of your lab.

8.3 If POPs are to be transported, including between University buildings, the packaging must comply with the conditions specified on the approval. This includes specific labelling requirements and ensuring secondary containment is sufficient to contain any release if the primary container should leak.

8.4 POPs must not be carried on passenger services vehicles (e.g. bus, train, taxi).

9 Storage

9.1 POPs shall be stored within labelled laboratory storage areas that are dedicated to storage of these compounds and any other reagents or waste material containing POPs used in the project. This will ensure that all the laboratory reagents used in this project are kept separate, can be easily identified and any relevant measurements made and documented prior to disposal.

10 Disposal

The University is undertaking research on the destruction of POPs waste. We will attempt to destroy POPs waste via these methods in the first instance.

10.1 The HCM shall be notified when POPs or POPs-contaminated waste requires disposal, and will co-ordinate an approved disposal method.

10.2 POPs-contaminated waste that cannot be adequately destroyed in-house will be collected for disposal by chemical waste contractors who are licenced to collect and dispose of it, or in accordance with a current EPA notice regarding environmentally sound disposal of POPs.

10.3 The HCM shall be notified once work using a POP is concluded. The HCM will inform the EPA when we no longer need to hold one or more of the substances on our approval.

11 Record-keeping

11.1 The owner of a POP must ensure a Safety Data Sheet is available for it. This may be digital or hard copy.

11.2 The owner of a POP must ensure SciTrack is kept updated with the correct location and owner of POPs containers.

11.3 When a SciTrack container of POPs is used up, it must be marked as disposed in SciTrack.

12 Lab Management

In any lab where POPs are held, it must be ensured that:

12.1 The laboratory is adequately secured to exclude unwanted organisms, and their presence is monitored as appropriate.

12.2 The laboratory is secured from unauthorised access

12.3 The laboratory meets design requirements specified in Regulations 18.3-18.5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017. These are with regard to the laboratory being impervious to hazardous substances, designed to prevent hazardous substances escaping the laboratory, and secured from unauthorised access.

13 Use

13.1 A risk assessment must be created for POPs use that includes controls to ensure:

a) nobody in the facility is exposed to a level of POPs that could cause harm.

b) POPs are not released out of the facility except via approved disposal or transfer pathways.

c) Users of laboratories where POPs are held are provided with sufficient instruction on the containment regime to enable them to meet their responsibilities under the approval.

13.2 If a breach of containment occurs, the HCM must be contacted immediately, as WorkSafe NZ and the EPA are to be notified within 24 hours of a breach being detected. The HCM will do the notification

14 Monitoring

14.1 Prior to a staff or student using POPs, they must agree to the conditions listed in this application and any additional conditions listed on the licence.

14.2 The HCM will undertake a yearly 'conditions check' to ensure POPs use meets the requirements of the approval.