



ACT
Government

Hazardous Materials Environment Protection Policy

Environment Protection Authority
March 2022

Acknowledgement of Country

Yuma

Dhawura nguna ngurumbangu gunanggu Ngunnawal.
Nginggada dindi dhawura Ngunnawalbun yindjumaralidjinyin.
Mura bidji mulanggaridjindjula.
Naraganawaliyiri yarabindjula.

Hello,

This country is Ngunnawal (ancestral/spiritual) homeland.
We all always respect elders, male and female, as well as Ngunnawal country itself.
They always keep the pathways of their ancestors alive.
They walk together as one.

The Environment, Planning and Sustainable Development Directorate acknowledges the Ngunnawal people as Canberra's first inhabitants and Traditional Custodians. We recognise the special relationship and connection that Ngunnawal peoples have with this Country. Prior to the dislocation of Ngunnawal people from their land, they were a thriving people whose life and culture was connected unequivocally to this land in a way that only they understand and know, and is core to their physical and spiritual being. The disconnection of the Ngunnawal people from Culture and Country has had long-lasting, profound and ongoing health and well-being effects on their life, cultural practices, families and continuation of their law/lore. The Environment, Planning and Sustainable Development Directorate acknowledges the historic dispossession of the Ngunnawal people of Canberra and their surrounding regions. We recognise the significant contribution the Ngunnawal people have played in caring for Country as for time immemorial they have maintained a tangible and intangible cultural, social, environmental, spiritual and economic connection to these lands and waters.

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PART A: ENVIRONMENT PROTECTION POLICY CONTEXT

1. WHAT ARE ENVIRONMENT PROTECTION POLICIES?

Environment Protection Policies (EPPs) are policies and guidelines, issued to coincide with the *Environment Protection Act 1997* (the Act), which help to explain and apply the Act and the Environment Protection Regulation 2005 (the Regulation) made under that Act. This EPP is one of several EPPs.

To explain the policy context, EPPs often summarise or explain the Act. However, the Act, Regulation and other legislation remain the authoritative statement of the law; readers should refer to the actual text of the legislation whenever necessary.

The **Environment Protection Authority (EPA)** updates EPPs to ensure they are relevant, useful, reflect both experience and current best environmental practice and are in line with community expectations.

1.1 What is the difference between EPPs, the Act and Regulation?

The Act and Regulation are legislative instruments that are legally binding. As policies and guidelines, the EPPs are not legally binding. They support the operation of the legislation by providing certainty and transparency in its administration.

For example, the EPA will consider any relevant EPPs in determining the conditions of an **environmental authorisation** or **environmental protection agreement**.

1.2 How do the Act, Regulation and EPPs work together?

The Act, Regulation and EPPs provide an integrated framework for **environment** protection as follows:

- The Act is a general legislative framework that establishes the machinery necessary for **environment** protection. For example, it establishes the independent statutory role of the EPA and provides for instruments like **environmental authorisations**.
- The Regulation contains rules and standards about specific aspects of the **environment**. Examples of matters dealt with in the Regulation are setting environmental standards for **water** quality and noise levels for areas of the ACT.
- The EPPs contain guidance on meeting the requirements of the Act and the Regulation.

Sections 3C and 3D of the Act set out the **Objects** and **Principles** of the Act and require, along with Section 12, that the Act shall be construed and administered to be consistent with the **Objects** and **Principles**. As the Regulation and the EPPs are made under the Act, this principle applies with equal force to those instruments.

1.3 How are EPPs produced and who has input?

The EPA develops draft EPPs. Before these are finalised, the EPA must advertise the release of drafts and give the public 40 working days (8 weeks) to comment on them. The EPA must consider these comments and may incorporate them into the EPP if appropriate.

An EPP can only be made with the consent of the Minister responsible for the Act.

1.3.1 How will people know about changes to policies?

The EPA must publish a notice in the Legislation Register and provide additional public notice when an EPP is finalised, changed, or revoked, except when changes are only editorial. For example, if the name of a government agency has changed, the name can be changed in the EPPs without public consultation or notification in the Legislation Register.

The EPA cannot vary or revoke an EPP without the Minister's consent.

1.4 How many EPPs are there?

Currently, there are eight EPPs:

- General
- Water Quality
- Air
- Noise
- Contaminated Sites
- Hazardous Materials (this EPP)
- Motor Sport Noise
- Outdoor Concert Noise.

The EPA may develop other EPPs over time as required to meet emerging issues or community expectations.

1.5 How are the EPPs structured?

The EPPs are generally structured along the following lines:

- Background—sets out the context and underlying policy objectives of the EPP.
- Policies and Guidelines—explains how relevant provisions of the Act and Regulation work and contains the substantive policies and guidelines of the EPP.
- Glossary—contains explanations of words and abbreviations, particularly those specific to the particular EPP. Terms used in more than one EPP are included in the Glossary for the General EPP.
- Appendix—contains detailed or technical information separated from policies and guidelines for easy reference.

1.6 To whom and where do the EPPs apply?

The EPPs apply to all people and all things for activities on all **land** within the ACT, including **land** owned by the Commonwealth, to which the Act applies. This includes the ACT Government and its agencies and government-owned companies. At present the Act does not bind the Commonwealth Government; however, generally Commonwealth agencies have committed to comply with the Act.

1.7 How are EPPs kept up to date?

EPPs can be amended at any time to keep them up to date. All amendments, other than those of an editorial nature, must go through the public consultation process outlined above.

1.8 Notes on reading this EPP

Where the EPP refers to a legal requirement, it will give the source of this requirement for reference. Wherever a term is used that is defined in the Act or Regulation, it appears in bold.

2. ROLE OF THIS EPP

2.1 Background

This Hazardous Materials EPP has been prepared by the EPA in accordance with Part 4 of the Act.

This EPP is designed to help people understand the Act and the Regulation as they apply to the management of hazardous materials to minimise the risk of adverse impacts they may have on the

environment and human health. There are general offences in the Act, which carry substantial penalties. This **EPP** provides guidance on meeting these legislative requirements, including the need to adopt the **general environmental duty** (Section 22), to prevent or minimise **environmental harm**.

The role of **EPPs** and their relationship to the Act and the Regulation is explained in the General **EPP**. The General **EPP** also contains other material of relevance to the Hazardous Materials **EPP** such as environmental management instruments, enforcement and access to information held by the **EPA**.

This **EPP** should be read together with the General and other relevant **EPPs**.

This **EPP** contains information and policies relating to the manufacture, supply, use, storage, transport and disposal of hazardous materials (including hazardous chemicals) and aims to minimise the risk of adverse impacts of hazardous materials on the **environment** and human health. This **EPP** explains the procedures used by the **EPA** to regulate the manufacture, supply, use, storage, transport and disposal of hazardous materials within the ACT, and provides guidance for those involved with hazardous materials to meet their legislative obligations under the Act.

In the past, hazardous substances have been manufactured, supplied, used, stored, transported and disposed of without a full knowledge of the potential impacts of these activities on human health and the **environment**.

Examples of hazardous substances associated with activities known to have caused an unacceptable risk to human health or the **environment** include: asbestos, polychlorinated biphenyls (**PCBs**), organochlorine pesticides (**OCPs**), per and polyfluorinated alkyl substances (**PFAS**) surfactants, heavy metals (for example, arsenic, lead, chromium, cadmium and mercury), industrial solvent trichloroethylene (**TCE**) and hydrocarbons (petroleum products).

At present, although hazardous materials are generally managed in a responsible manner, there is still potential for **environmental harm** to occur due to unforeseen circumstances, accidents or criminal acts.

2.2 Administration consistent with Objects of the Act

This **EPP** has been developed in accordance with the **Objects** (Section 3C) and **Principles** (Section 3D) of the Act. This **EPP** should be read and applied to best give effect to the **Objects** and **Principles** of the Act.

To ensure this **EPP** is consistent with the **Objects** and **Principles** of the Act, this **EPP** has been developed in accordance with the following:

- The level of regulatory control over a specific **activity** involving a particular hazardous material should reflect the risk to the **environment** from that **activity** with that material. For example, the risk to the **environment** from the use of halons to extinguish fires is so great that their use is banned except for essential uses where there are no alternative substances.
- Where possible, regulatory controls on hazardous materials should not adversely impact on regional commerce and should be consistent with national competition policy principles. Specifically, any restriction on competition should apply on the basis that the public benefit from the restriction outweighs the public interest in competition. In this situation 3C(1)(d) of the Act, to achieve effective integration of environmental, economic and social considerations in decision-making processes, will need to be applied.
- The **EPP** is consistent with national and international agreements relating to hazardous materials. For example:
 - in 1992 the Commonwealth, all states and territories, and the Australian Local Government Association signed the Intergovernmental Agreement on the Environment (IGA on the Environment). The IGA on the Environment clarified the role of the three levels of government in the management of the **environment**. It sets out nationally agreed principles of **environmental** policy, such as the **polluter pays principle**, which details that those who generate contamination should bear the costs of any **assessment** and **remediation** that may be required. The **polluter pays principle**

is included and defined in Section 3D of the Act

- the IGA on the Environment also provides for the National Environment Protection Council (NEPC) established under the *National Environment Protection Council Act 1994* (Cmlth) (NEPC Act) and mirrored legislation in all jurisdictions. This is a Ministerial Council with powers to establish, monitor and report on **National Environment Protection Measures (NEPMs)**, which include standards, guidelines, goals and associated protocols for various aspects of **environment** protection. Existing **NEPMs** include: Air Toxics, Ambient Air Quality, Diesel Vehicle Emissions, Used Packaging Materials, National Pollutant Inventory, Movement of Controlled Waste between States and Territories and the Assessment of Site Contamination. Section 3C(1)(e) of the Act states that an **Object** of the Act is to facilitate the implementation of **NEPMs** under **national scheme laws**.

Note: The IGA on the Environment is a schedule to the NEPC Act.

- several international conventions address the management and disposal of various hazardous materials, such as the Montreal Protocol on Substances that Deplete the Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and the Minamata Convention on Mercury.

Note: Ozone depleting substances are regulated by the Commonwealth under the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989

- Section 3C of the Act states that an **Object** of the Act is to minimise the risk to human health, while Section 3D creates a **Principle** of acknowledging environmental needs in economic and social decision making. The **Objects** and **Principles** help support an integrated approach to the management of hazardous materials. The **EPA** works with other regulatory agencies such as public health, planning, construction, work health and safety, waste management and dangerous goods transport authorities to ensure an integrated approach.

2.3 Activities addressed by this EPP

This **EPP** provides guidance for the manufacture, supply, use, storage, transport and disposal of hazardous material in relation to the Act, which includes:

- the use of agricultural and veterinary chemicals (pest control chemicals)
- the use of industrial chemicals
- the management of mercury (Minamata Convention)
- the management of persistent organic pollutants (including Stockholm Convention chemicals)
- the management of scheduled wastes
- the classification of wastes
- the movement of regulated waste within the ACT
- the interstate movement of controlled wastes
- the National Pollutant Inventory (NPI)
- the demolition of structures/facilities and buildings.

2.4 What about other legislation?

This **EPP** is complemented by other environmental programs and legislation aimed at protecting human health and the **environment**.

More detailed information is available as follows:

| Activity | Act/Program | Contact |
|---|--|--|
| Waste management | <i>Waste Management and Resource Recovery Act 2016</i> | ACT NoWaste, Transport Canberra and City Services Directorate (TCCS) |
| Land use and development | <i>Planning and Development Act 2007</i> | ACT Planning and Land Authority, Environment, Planning and Sustainable Development Directorate (EPSDD) |
| Protection of public health | <i>Public Health Act 1993</i> | Health Protection Service, ACT Health Directorate |
| Heritage protection | <i>Heritage Act 2004</i> | Heritage Unit, EPSDD |
| Preservation of the natural environment | <i>Nature Conservation Act 2014</i> | Conservator of Flora and Fauna, EPSDD |
| Working with hazardous chemicals | <i>Work Health and Safety Act 2011</i> | WorkSafe ACT |
| Movement of Controlled Wastes | <i>National Environment Protection Council Act 1994</i> <i>Environment Protection Regulation 2005</i> | EPA, Access Canberra (AC) |
| Management of Clinical Waste | <i>Clinical Waste Act 1990</i> <i>Clinical Waste Manual 1991</i> | ACT NoWaste, TCCS (legislation and policy). Clinical Waste Controller, Access Canberra (regulator) |
| Sale, purchase, storage, use and handling of scheduled substances | <i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989</i> | Commonwealth Department of the Environment Water, Heritage |
| Transporting dangerous goods | <i>Dangerous Goods (Road Transport) Act 2009</i> | WorkSafe ACT |
| Demolition of structures containing hazardous materials | <i>Planning and Development Act 2007</i> | ACT Planning and Land Authority, EPSDD |

ACT legislation is available on the ACT Legislation Register at www.legislation.act.gov.au.

To contact the ACT Government agencies listed above, call Access Canberra on 13 22 81.

3. POLICY OBJECTIVES

The objectives of the Hazardous Materials **EPP** are to provide information to:

- minimise the risk of adverse impacts on the **environment** and human health, both within the ACT and elsewhere, from the manufacture, supply, use, storage, transport and disposal of hazardous materials

- ensure the ACT meets its national obligations and plays its part in Australia meeting its international obligations under national and international agreements relating to hazardous materials
- ensure the manufacture, supply, use, storage, transport and disposal of hazardous materials can be conducted without being likely to present a significant risk of harm to human health or a significant risk of **material** or **serious environmental harm**.

4. COMPLIANCE WITH THIS EPP

EPPs are not legally binding; they are statements of policy, guidelines and explanations of legal requirements. If something is legally required, this EPP refers to the source legal documents (usually the Act or Regulation). EPPs have been developed to help people comply with the legal requirements of the Act and Regulation and the **general environmental duty** (Section 22), which requires people to take practicable and reasonable steps to prevent or minimise **environmental harm** or **environmental nuisance**.

The EPA has produced a range of educational materials, including industry specific information sheets, guidelines, standards and codes of practice to inform the public of their obligations under, and promote a high level of compliance with, the Act and the Regulation.

These materials can be found on the Access Canberra website at www.accesscanberra.act.gov.au.

5. COMPLIANCE AND ENFORCEMENT

The EPA has a range of administrative, civil and criminal enforcement actions available to ensure compliance with, and enforcement of, the Act and Regulation. Section 11 of the General EPP outlines the enforcement actions available under the legislation.

6. REVIEW OF EPA DECISIONS

Certain decisions made by the EPA are reviewable. Decisions can be reviewed in two ways:

- Internally reviewable decisions where a decision is reviewed by the EPA.
- Reviewable decisions where a decision is reviewed by the ACT Civil and Administrative Tribunal (ACAT).

Under Section 136 of the Act, which specifies both types of decision, an eligible person can make an application either to the EPA or to ACAT for review of a decision.

7. LEGISLATIVE REQUIREMENTS

This section describes the policy and legislative framework used to manage the environmental risks associated with activities that involve hazardous materials. The management mechanisms applying to activities involving specific hazardous materials are described in Section 9 of this EPP.

Materials that have the potential to cause **environmental harm** have a variety of uses including building and medical applications, pest control, refrigeration and air conditioning, automotive applications and cleaning. Hazardous materials may also be produced as a result of industrial, commercial and domestic processes and activities.

In the past, materials have been used without a full knowledge of their potential impacts on human health and the **environment**. Examples of materials that have subsequently been found to pose an unacceptable risk to human health or the **environment** include asbestos, ozone-depleting substances, lead, mercury, **PCBs**, **PFAS** and **OCPs**.

The policies and procedures outlined in this EPP are designed to minimise the risk from activities that involve those materials and, for materials that pose an unacceptable risk, to facilitate their removal and destruction. There may, however, be instances where the risks associated with hazardous materials and **wastes** can be eliminated through appropriate treatment, which then allows the materials to be used or reused for other purposes rather than be removed and destroyed.

As a general principle, people undertaking activities using materials which pose a risk to the **environment** and human health are encouraged to consider alternatives that pose a lower level of risk. Adopting lower risk approaches to undertaking activities is a principle of cleaner production and is essential to the community's move towards ecologically sustainable development.

Considerable work is being done nationally and internationally to minimise the risk to the **environment** from activities which involve hazardous materials. International agreements are implemented through agreements between the Commonwealth, states and territories.

7.1 Environment Protection Act and Regulation provisions

There are both general and specific provisions under the Act related to hazardous materials and **wastes**. These are outlined below.

7.2 Environmental Duties

The Act creates environmental duties:

- A **general environmental duty** (Section 22 of the Act)
- The duty to notify the **EPA** of actual or threatened **environmental harm** (Section 23 of the Act)
- The duty to notify existence of **contaminated land** (section 23 A)

7.2.1 General Provisions

The Act provides for a **general environmental duty** which requires a person to take reasonable and practical steps to prevent or minimise **environmental harm** or **environmental nuisance** when conducting an **activity**.

The Act also provides a duty to notify of actual or threatened **environmental harm** or **contaminated land** which requires a person to notify the **EPA** as soon as practicable after becoming aware an **activity** has, is or is likely to cause **environmental harm** or that **land** is **contaminated**.

It is an offence under the Act to knowingly or recklessly pollute the **environment**, causing **environmental harm**. It is also an offence under the Act to place a pollutant where it could cause **environmental harm**.

The Act also provides for environmental management instruments that may be used to regulate activities involving hazardous materials. See Section 7.3 below.

7.2.2 Specific Provisions

Provisions of the Act and Regulation used to regulate specific activities involving hazardous materials are:

- Section 23A of the Act, which requires a person to notify the **EPA** of **land** that is **contaminated** and is presenting, or likely to present, a significant risk of harm to human health, or of **environmental harm**
- Section 42 of the Act, which requires a person conducting a Class A **activity** listed in Schedule 1 (e.g. transport of regulated and controlled **wastes**) to hold an **environmental authorisation** (see Section 7.3.1 below)
- Section 159A of the Act, which enables the **EPA** to require information for prescribed purposes—the NPI is implemented using this provision
- Part 5 of the Regulation which states that **PCB** material is taken to cause **environmental harm** if it enters the **environment**
- Part 6 of the Regulation which specifically deals with **Agvet chemical products**
- Part 7 of the Regulation which specifically deals with **controlled waste** (hazardous waste may be a **controlled waste**)

- Schedule 3 of the Regulation which outlines the **pollutants** entering **waterways** taken to cause **environmental harm**.

7.2.3 General environmental duty

The **general environmental duty** requires all people to take practicable and reasonable steps to prevent or minimise any **environmental harm** or **environmental nuisance** their actions may cause. **Environmental harm** is defined as any impact that has the effect of degrading the **environment**. Therefore, any **activity** associated with the reckless and/or negligent use of hazardous materials is unlawful.

7.2.4 Duty to notify actual or threatened environmental harm

Section 23 of the Act creates a duty to notify actual or threatened **environmental harm** and requires a **relevant person**, when they realise their actions have caused or are likely to cause **material** or **serious environmental harm** from pollution, to report the matter to the **EPA** as soon as possible. This requirement applies even if reporting an incident might involve admitting to something unlawful. To encourage compliance with this provision, Section 150 of the Act provides that this information is not admissible in evidence against the person in a prosecution under the Act.

In the event of a notification under Section 23 (including Section 23A – Duty to notify existence of **contaminated land**) an assessment must be commenced within three months of the notification to determine the extent of any impacts and be completed within six months or timeframe agreed by the **EPA**.

7.3 Environmental Management Instruments

The Act creates environmental management instruments. An explanation and general policies on the use of the instruments is described in Section 10 of the General **EPP**. The application of these instruments to hazardous materials is described below.

7.3.1 Environmental authorisations

Environmental authorisations (Part 8 of the Act) are a form of licence to conduct an **activity** (Schedule 1 of the Act, Class A activities) that has a significant potential to cause **environmental harm** and sets out conditions under which the **activity** must be conducted. **Environmental authorisations** are required for many activities involving hazardous materials.

Examples of activities involving hazardous materials that require an **environmental authorisation** are:

- commercial incineration of wastes (including medical, chemical and municipal wastes)
- commercial landfills and waste transfer stations
- **contaminated land** management
- sewerage treatment works
- petroleum storage
- commercial use of chemicals
- preservation of timber
- electronic waste treatment.

7.3.2 Environmental protection agreements

Environmental protection agreements (Part 7 of the Act) are formal, but non-contractual, agreements

to conduct an **activity** (Schedule 1 of the Act, Class B activities) between the **EPA** and businesses. The **EPA** may also request a person regularly involved in the manufacture, supply, use, storage, transport, disposal or management of hazardous materials to enter into an **environmental protection agreement** under Section 38 of the Act. The terms of such an agreement would depend on the potential nature and extent of the subject hazardous materials.

For example, an **environmental protection agreement** to manage a site contaminated by hazardous materials would include requirements for the assessment, remediation (if required) and independent **environmental audit** to ensure the site is suitable for the intended and permitted uses. In this case, there are specific EPA guidelines dealing with the **assessment** and validation of sites containing above and below ground fuel storage tanks. The **EPA** endorses the use of the ASC **NEPM** for the assessment of sites containing or suspected of containing fuel storage tanks. Information sheets containing the **EPA** requirements for sites containing above ground and underground fuel storage tanks and the disposal of soil from these sites can be found at www.accesscanberra.act.gov.au.

An **environmental protection agreement** can also be entered into as a means of enforcing an ongoing site management plan. For example, the ongoing management of residual site contamination.

Non-compliance with an agreement may result in the **EPA** issuing an **environment protection order** under the Act to ensure compliance or cancelling the **environmental protection agreement** and requiring the person undertaking the **activity** to hold an **environmental authorisation** for the **activity**.

7.3.3 Environment protection orders

An **environment protection order** is an instrument issued by the **EPA** under Section 125 of the Act, where the **EPA** is satisfied that the person has breached the Act or an **environmental authorisation** condition. The **EPA** may issue an **environment protection order** for activities involving hazardous materials subject to compliance with certain conditions.

This option may be adopted where:

- the **activity** would not present, or would not be likely to present, a significant risk of harm to human health or a significant risk of **material** or **serious environmental harm**
- the **activity** would not present, or would not be likely to present, a significant risk of harm to human health or a significant risk of **material** or **serious environmental harm** while measures for its containment continue. An example of this is where an assessment finds that an industrial site is contaminated with hydrocarbons (i.e. petroleum products) in excess of levels suitable for certain sensitive land uses (e.g. residential) but below those suitable for its current use. In this case the conditions in an **environment protection order** may include that provided the current **land** use continues and measures employed to contain and monitor the hazardous material are in place the site would not pose a significant risk of harm to human health or the **environment**.

7.3.4 Other environmental management instruments

Enforceable undertakings (Part 14A) are an alternative to infringement notices and criminal prosecutions. They are voluntary binding agreements that must be proposed by an alleged offender and accepted by the **EPA**. An **enforceable undertaking** requires the alleged offender to undertake tasks to settle an alleged contravention of the Act and remedy the harm to the **environment** and the community.

Other environmental management instruments that may be used to manage activities involving hazardous materials are:

- an environmental improvement plan, which is a formal plan under Part 9, Division 9.1 of the Act to improve the environmental performance of an **activity** and achieve best environmental practice over time

- an environmental audit, which is an assessment of an **activity** to identify causes of **environmental harm** or breaches of the Act and to determine the need for any change in management practices to reduce environmental impact (Part 9, Division 9.2 of the Act)
- an environmental protection order, which is an instrument issued by the **EPA** under Section 125 of the Act where the **EPA** is satisfied that the person has breached the Act or an **environmental authorisation** condition
- an **emergency plan**, which is a plan for dealing with the foreseeable but unplanned entry into the **environment** of authorised **pollutants** that may cause **serious** or **material environmental harm** (Part 9, Division 9.3 of the Act)
- a **financial assurance**, which is provided to the **EPA** by an **environmental authorisation** holder where there is a likelihood that action will be required to remedy **environmental harm** caused by the authorised **activity** (Part 9, Division 9.4 of the Act).

Any use of these instruments would be in accordance with the policies outlined in the General **EPP**.

PART B: HAZARDOUS MATERIALS

8. WHAT ARE HAZARDOUS MATERIALS

Hazardous materials are any materials that have the potential to harm human health, damage property or cause harm to human health or the **environment** due to their physical, chemical or biological properties. These materials may be solids, liquids or gases. Hazardous materials include many commonly found industrial, commercial, pharmaceutical, agricultural and domestic chemicals; for example paint, cleaning chemicals, degreaser, detergent, pesticides, herbicides, fuel, welding fumes and energy efficient lighting (e.g. compact fluorescent lamps).

Note: WorkSafe ACT administers legislation specific to labelling, handling and storage of hazardous chemicals and should be contacted for further information.

8.1 Classification of hazardous materials for disposal

Hazardous materials **waste** may be classified as **regulated waste** and/or controlled waste.

Regulated waste is defined in Schedule 1, Section 1.1(A) of the Act as **waste** that is, or contains one or more of the following kinds of **waste**:

- a) hazardous **waste**
- b) group A **waste**
- c) group B **waste**
- d) group C **waste**
- e) industrial **waste**.

Hazardous **waste**, group A, B and C **wastes** and industrial **waste** are defined in the ACT's Environmental Standards: Assessment and Classification of Liquid and Non-liquid Wastes (2021) (the Standards).

A copy of the Standards can be found on the Access Canberra website at www.accesscanberra.act.gov.au.

Controlled **waste** is defined in Part 7 Division 7.1 Section 56 of the Regulation as a thing mentioned in the Movement of Controlled Waste between States and Territories **NEPM**, Schedule A, list 1 (**Waste** categories) provided it has one or more of the characteristics mentioned in the **NEPM**, Schedule A, list 2 (Characteristics of controlled wastes).

The **NEPM** can be found on the NEPC website at www.nepc.gov.au.

9. MANAGEMENT OF HAZARDOUS MATERIALS

Specific management controls are required for specific types of hazardous materials, some of which are subject of national and international agreements. These are outlined below.

9.1 Hazardous materials surveys

Hazardous materials have been widely used in the construction, insulation (asbestos), maintenance (lead paint), heating (heating oil) and cooling (ozone depleting substances) of built structures for many years. These materials can have adverse effects on human health and the **environment**.

For the demolition of any existing commercial/industrial premises or multi-unit housing which was constructed prior to 1985, a hazardous material survey must be undertaken by a suitably qualified consultant and submitted with the development application (DA) required by the Planning and Land Authority. These documents are then forwarded to the **EPA** for review and comment. The survey must be in the form of a written A4 report and can be submitted electronically or in hard copy.

The hazardous materials survey must identify, evaluate and propose a management plan (including the use of appropriately licensed contractors for the storage, transport and disposal) of all hazardous

materials including fuel tanks, asbestos, lead, **PCBs** containing materials, synthetic mineral fibre (SMF) and ozone depleting substances that may be present on the site.

If the hazardous material survey is assessed by the **EPA** as adequately addressing all hazardous materials issues associated with the site, a letter of endorsement is issued to the proponent or their representative. However, if a hazardous materials survey has not been provided or fails to address all issues associated with the site and **EPA** records indicate that hazardous materials may be present on the site, the DA may not be supported by the **EPA**.

Note: There are mandatory requirements for recording hazardous materials in the Dangerous Substances Act 2004, for example asbestos. Contact WorkSafe ACT for further information.

9.2 Scheduled waste

The National Strategy for the Management of Scheduled Waste was endorsed by the Australian and New Zealand Environment and Conservation Council (ANZECC) in 1993 and provides for the safe management and disposal of scheduled wastes. Scheduled waste is a material or article containing a chemical, or mixture of chemicals, exceeding the threshold concentration and threshold quantity, which is:

- organic in nature
- resistant to degradation by chemical, physical or biological means
- toxic to humans, animals, vegetation or aquatic life
- bioaccumulative in humans, flora and fauna
- listed on Schedule X (the agreed list of scheduled wastes) of the National Strategy for the Management of Scheduled Waste.

PCBs, hexachlorobenzenes (HCBs) and OCPs such as DDT, lindane, chlordane, heptachlor, endrin, aldrin, pentachlorophenol, isodrin, pentachloronitrobenzene, hexachlorophene and 2, 4, 5-T are classified as scheduled wastes. These chemicals are targeted for close attention by regulatory agencies because of their potentially harmful characteristics.

These materials are addressed under the Stockholm Convention on Persistent Organic Pollutants (the Stockholm Convention), with its objectives to protect human health and the **environment** from persistent organic pollutants (POPs). Countries that ratify the Stockholm Convention agree to take measures to eliminate or reduce environmental releases of these POPs in accordance with the Stockholm Convention requirements.

A national approach has been implemented which provides for the safe management and disposal of scheduled wastes to ensure adequate protection of human health and the **environment**. Three management plans covering all scheduled wastes in the groupings **PCBs**, OCPs and HCBs have been implemented under the national approach.

Further information on the Stockholm Convention and POPs can be found on the United Nations Environment Programme website at www.pops.int/.

9.2.1 Polychlorinated Biphenyls

The national **PCB** Management Plan deals with the management of **PCBs** that were formally used in electrical devices such as capacitors because of their chemical stability and good insulating properties. **PCBs** are no longer used in new electrical equipment but remain in some older equipment such as transformers, lighting and power capacitors and telecommunications. **PCBs** are POPs.

The importation of **PCBs** or equipment containing **PCBs** was banned under federal law in 1976. Therefore, it is reasonable to consider equipment imported into Australia after 1976 to be **PCB** free.

The major policy consideration relating to **PCB** management is dealing with large holdings of **PCBs** and **PCB**-containing equipment that may still be found in older buildings in the ACT. Large equipment items are defined as transformers of any size and capacitors weighing more than 1kg. Large **PCB** holdings are defined as **PCB**-containing equipment, located at one site or building, which contains more than the notifiable quantity of scheduled **PCB** waste, being 10kg.

Small equipment items containing **PCBs**, such as electric lighting capacitors, may be found in households. Contact the **EPA** for further information.

The information booklet Identification of **PCB** Containing Capacitors, ANZECC 1997, assists with the implementation of the **PCB** management plan. Based on a survey of old electrical equipment, this booklet contains the name, product code and **PCB** status of electrical components and may be of assistance in the identification of **PCB** holdings.

It should be noted that under Part 5 of the Regulation, **PCB** materials are taken to cause **environmental harm** if they enter the **environment**. It is an offence under the Act to cause **environmental harm**; the penalties associated with this offence range from 500 penalty units to 2000 penalty units.

Copies of the Identification of **PCB** Containing Capacitors booklet are available on the NEPC website at www.nepc.gov.au. If the documents cannot be accessed, contact NEPC via their website or phone (02) 6274 1111.

9.2.2 Organochlorine Pesticides

The OCP Management Plan deals with the management of chemicals, principally pesticides, which are no longer registered for use by the **Australian Pesticides and Veterinary Medicine Authority (APVMA)**. OCPs are POPs.

As OCPs are no longer registered by the **APVMA**, their release into the **environment** is taken to cause **environmental harm** under Part 6 of the Regulation.

The management of OCPs is also dealt with in Section 10.1.2 of this **EPP**.

Further information on OCPs can be found on the **APVMA** website at www.apvma.gov.au.

9.2.3 Electronic waste

Electronic waste (e-waste) includes items like computers, televisions, printers, mobile telephones and modems that contain substances with the potential to cause **environmental harm** when released to the **environment**.

Under Schedule 1 of the Act the operation of a commercial facility for the treatment of the hazardous components of e-waste is a Class A activity, and the operation of a commercial facility for the storage and dismantling of e-waste is a Class B activity. Class A activities require an **environmental authorisation** and Class B activities require an **environment protection agreement** under the Act.

Further information on the disposal of e-waste can be found on the Transport Canberra and City Services website at <https://www.cityservices.act.gov.au/recyclopaedia/items/e/e-waste-computers,-printers,-modems,-tvs-etc>.

9.3 Agricultural and veterinary pest control chemicals

Agricultural and veterinary (Agvet) pest control chemicals are widely used in primary production and domestic situations to control, repel or eradicate pests and prevent or control animal diseases and injuries. These chemicals can have adverse effects on human health and the **environment**.

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (the Rotterdam Convention) is a multilateral agreement which establishes a procedure for obtaining and exchanging information between countries regarding certain hazardous chemicals. The Rotterdam Convention covers pesticides and industrial chemicals that have been banned or severely restricted due to an unacceptable risk to human health or the **environment**.

The management of Agvet pest control chemicals in Australia is the responsibility of the Commonwealth, state and territory governments. The Commonwealth, through the **APVMA** is responsible for the assessment of the suitability of Agvet pest control chemical uses and the regulation of manufacture, distribution and sale of these chemicals up to the point of retail sale. State

and territory governments are responsible for the control of use of Agvet pest control chemicals beyond the first point of retail sale.

The **Agvet Code**, which makes provisions for the evaluation, registration and control of **Agvet chemical products** and related matters, is used by the **APVMA** to assist in carrying out their responsibilities.

Under Part 6 of the Regulation, a Agvet pest control chemical is deemed to cause **environmental harm** if it enters the **environment** unless it is registered under Part 2 of the **Agvet Code** and is being used in accordance with the instructions on the approved label for the product, or in accordance with an **APVMA** permit. This is to ensure that only **APVMA** registered chemicals are used and they are used in strict accordance with the chemical product label or permit conditions.

It is therefore prohibited under Part 6 of the Regulation to use unregistered Agvet pest control chemicals or to use a particular chemical for which an **APVMA** permit has not been granted. It is an offence under the Regulation to store, use or dispose of an **Agvet chemical product** in a way that is not in accordance with the instructions on the approved label for the product or in accordance with the **APVMA** permit.

Agvet pest control chemical products containing DDT, dieldrin, Aldrin, isodrin, toxaphene, chlordane, heptachlor, lindane and pentachlorophenol are examples of unregistered products.

Agvet chemical products such as those used for vertebrate pest control (sodium fluoroacetate (1080), alphachloralose and warfarin) and arsenic trioxide, which is used in termite control, are examples of pest control chemical products which must be used in accordance with directions specified on the label of the registered chemical or directions specified in an **APVMA** permit.

The commercial use of chemical products registered under the **Agvet Code** for pest control or turf management is a Class A activity and requires an **environmental authorisation**. Commercial use is defined as the use of chemical products, registered or permitted by the **APVMA** by a pest control or turf management business or company for fee, gain or reward or as part of a business, but excludes primary production and **water** treatment. A standard set of **environmental authorisation** conditions applies to the commercial use of pest control chemicals. Copies of the standard conditions may be obtained from www.accesscanberra.act.gov.au.

Under Automatic Mutual Recognition (AMR) legislation (*Mutual Recognition Act 1992* (Cth)), commercial pesticide users registered in other states and territories may be taken to be registered in the ACT and therefore may not require an **environmental authorisation** under the Act. AMR will be considered for pesticide users who primarily live or work outside the ACT and are licensed or registered outside the ACT. However, pesticide users must ensure they are eligible for AMR and notify the ACT Government of their intention to work in the ACT under AMR.

Further information on AMR and notification requirements can be found at www.accesscanberra.act.gov.au.

A pest control or turf management business or company may be a single operator or an organisation employing operators. In order to obtain an **environmental authorisation** the applicant and their employees must be able to demonstrate they have completed the required National Pest Management Industry Competency Standards (specified qualifications) prescribed by the Environment Protection Regulation 2005. In the case where a pest control business subcontract works to other pest control businesses, the subcontractor must also apply for an **environmental authorisation** and demonstrate their capacity to comply with **environmental authorisation** conditions.

In addition, ACT Government service provider agencies and persons contracted by government agencies are required to apply for an **environmental authorisation** prior to undertaking pest control activities for the government.

It is an offence under part 6 of the Regulation to use a **declared Agvet chemical product** containing a schedule 7 poison unless the person holds the specified qualifications for their use. The offence does not apply if a declared vertebrate poison is used in the form of a prepared bait and use is in accordance with an **environmental authorisation**.

It is offence under the Regulation to use an agricultural chemical product that contains a schedule 7 poison where the product is not a **declared Agvet chemical product**, unless the person uses the product as part of a farming or grazing activity under the supervision of another person (the

supervisor) who holds the specified qualification and who fulfils certain supervision requirements, and if the person uses the product not more than 4 days in the last month and 12 days in the last year.

It is an offence under the Regulation if a person fails to record the required information about the use of an **Agvet chemical product** within 48 hours after the use or fails to keep the record for two years after the date of the use. The record-keeping requirements do not apply to household or home garden products used in certain circumstances, or if the product is used to sanitise pool or spa water.

drumMUSTER is a national program that accepts empty agricultural and veterinary (agvet) chemical containers for recycling. For more information on container preparation and conditions visit the drumMuster website. <https://www.drummuster.org.au/>

Remondis runs this collection service at the Mitchell Resource Management Centre.

Collections are held on the first Thursday of each month between 10am and 12pm – by appointment only. Contact Remondis on 02 6270 7700 to arrange an appointment for disposal.

The Act and Regulation can be viewed on the ACT Legislation Register at www.legislation.act.gov.au/

Further information on **Agvet chemical products** can be found on the **APVMA** website at <https://apvma.gov.au/>.

Further information on the Rotterdam Convention can be found on the United Nations Environment Programme website at www.pic.int/.

9.4 National Environment Protection Measures

Two **NEPMs** made under the *National Environment Protection Council Act 1994* relate to hazardous materials and **waste**. These **NEPMs** are outlined below.

Copies of the **NEPMs** are available on the NEPC website at www.nepc.gov.au. If the documents cannot be accessed contact NEPC via their website or phone (02) 6274 1111.

9.4.1 Movement of Controlled Waste between States and Territories NEPM

The international movement of hazardous **wastes** (controlled **wastes** are considered to be hazardous material) is subject to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (the Basel Convention). This convention also regulates the interstate movements of hazardous **wastes**; its parties are obligated to ensure such **wastes** are managed and disposed of in an environmentally sound manner. The Commonwealth Government enforces the relevant provisions of the Basel Convention through the *Hazardous Waste (Regulation of Exports and Imports) Act 1989*.

The Movement of Controlled Waste between States and Territories **NEPM** provides a comprehensive national system for monitoring and reporting all interstate movements of controlled waste in line with the Basel Convention.

Provisions in the Act and the Regulation allow the ACT to implement the Movement of Controlled Waste between States and Territories **NEPM** made under the *National Environment Protection Council Act 1994*.

Further information on the Basel Convention can be found on the United Nations Environment Programme website at www.basel.int/.

9.4.2 Assessment of Site Contamination NEPM

The Assessment of Site Contamination **NEPM** made under the *National Environment Protection Council Act 1994* establishes a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by regulators, site assessors, environmental auditors, landowners, developers and industry. It provides protection of human health and the **environment**, where site contamination has occurred, through the development of an efficient and

effective national approach to the assessment of site contamination. This **NEPM** is further supported by the Contaminated Sites **EPP**.

9.5 Per-and Poly-fluoroalkyl Substances National Environmental Management Plan

The national approach to managing per-and poly-fluoroalkyl substances (PFAS) contamination is detailed in the PFAS National Environmental Management Plan (PFAS NEMP) and the PFAS Intergovernmental Agreement. Australian governments have also developed the National PFAS Position Statement to start a national conversation about ways to reduce future PFAS use.

PFAS are manufactured chemicals that have been used in Australia for more than 50 years. PFAS make products non-stick, water repellent and fire, weather and stain resistant. PFAS have been used in a range of products, such as carpets, clothes, paper, firefighting foams, pesticides and stain repellents. Some PFAS resist physical, chemical and biological degradation and are very stable. PFAS have become a concern because they do not break down easily, which means they can persist in the environment and organisms for a long time. Some PFAS are POPs and are therefore covered by the Stockholm Convention.

The environmental management of these hazardous materials is a high priority for Australian environmental regulators. This reflects the widespread presence of PFAS in the **environment**, its unusual chemical properties, the uncertainties associated with its potential risks, and the resulting need for a precautionary approach to protect the **environment** and human health.

The PFAS NEMP establishes a practical basis for nationally consistent environmental guidance and standards for managing PFAS contamination in the **environment**, including prevention of the spread of contamination. It supports collaborative action on PFAS by the Commonwealth, state, territory and local governments around Australia. The plan has been developed by all jurisdictions and recognises the need for implementation of best practice regulation through individual jurisdictional mechanisms. It represents a how-to guide for the investigation and management of PFAS contamination and **waste** management.

Further information on PFAS and the PFAS NEMP can be found on the Department of Agriculture, Water and the Environment website at www.pfas.gov.au. Further information on the Stockholm Convention can be found on the United Nations Environment Programme website at www.pops.int/.

9.6 Industrial Chemicals Environmental Management Standard (IChEMS)

The Commonwealth, state and territory governments are working towards strengthening industrial chemicals management laws in a nationally consistent manner to protect the environment through a commitment to improving controls on how these chemicals can be used, stored, handled and disposed of.

This is being facilitated by the introduction of the *Industrial Chemicals Environmental Management (Register) Act 2021* to allow the Commonwealth minister to list chemicals on a public register. The register is a single consistent source of information on how chemicals should be managed.

Industrial chemicals will be categorised and scheduled on the register based on their level of concern to the **environment**. This will help government, industry and the community make informed choices about these chemicals and make it easier for industry to choose less harmful chemicals.

Once established, the public register will be incorporated into the laws of each state and territory, allowing environmental risks to be managed consistently across Australia. A consistent system to regulate chemicals will result in better protection of human health and the **environment** by governments and will make it easier and more efficient for industry to manage chemical risks.

Further information on the IChEMS can be found on the Department of Agriculture, Water and the Environment website at www.awe.gov.au/environment/protection/chemicals-management/national-standard.

9.7 Minamata Convention on Mercury

The Minamata Convention is an international environmental agreement coordinated by the United Nations Environment Programme. The text of this convention was agreed to in January 2013. Australia ratified the Minamata Convention on 7 December 2021, when the signed Instrument of Ratification was deposited with the United Nations. The Convention entered into force for Australia on 7 March 2022.

The Minamata Convention introduces global controls to protect human health and the **environment** from anthropogenic (human-caused) releases of mercury and mercury compounds. The total health cost of Australian mercury emissions to the domestic economy was estimated at approximately \$52.7 million in 2020.

The objectives of the Minamata Convention are to:

- protect the **environment** and human health from the harmful effects of mercury exposure
- reduce mercury **pollution** from human activity
- continue Australia's role as an engaged and responsible global trading partner
- ensure that any approach taken provides a net benefit to the community, including by minimising the impact and cost to business and industry while still achieving the other objectives.

It is the EPA policy position that mercury and mercury containing products and wastes are to be managed in accordance with the convention's articles. Specific Convention Articles relevant to the appropriate management of mercury in the ACT include the following:

9.7.1 Manufacturing processes using mercury

Article 5(6) of the Minamata Convention states that new facilities employing manufacturing processes using mercury and mercury compounds are not allowed.

9.7.2 Reduce and eliminate mercury from artisanal and gold mining

Article 7(2) states that parties to the Minamata Convention must take steps to reduce and, where feasible, eliminate use of mercury in, and mercury emissions and releases from artisanal and small-scale gold mining.

9.7.3 Control of mercury emissions to the air from existing facilities

Articles 8(3), 8(5) and 8(6) of the Minamata Convention addresses mercury emissions to the air from existing coal-fired power plants and industrial boilers, smelting and roasting processes for non-ferrous metals, waste incineration facilities and cement clinker facilities.

9.7.4 Mercury emissions to the air from new facilities

Article 8(4) of the Minamata Convention addresses mercury emissions to the air from new facilities. This article requires the use of best available technology and best environmental practices to control and reduce mercury emissions.

9.7.5 Mercury releases from significant anthropogenic point sources

Articles 9(4) and 9(5) address mercury releases to the air and land from significant anthropogenic point sources. This article requires that such measures shall include one or more of:

- release limits
- use of best available techniques or best environmental practices
- multi-pollutant control strategies
- alternative measures.

9.7.6 Interim storage of non-waste mercury

Article 10(2) details measures to ensure that the interim storage of non-waste mercury and mercury compounds.

9.7.7 Waste mercury

Article 11(3)(a) and (b) details measures to ensure mercury waste is managed in an environmentally sound manner and only recovered, recycled, reclaimed or directly re-used for a use allowed under the Minamata Convention or for environmentally sound disposal.

9.7.8 Mercury contaminated sites

Articles 12(1) and 12(2) create a responsibility to develop strategies for identifying and assessing sites **contaminated** by mercury and actions to reduce the risks posed by such sites. Such strategies shall include an assessment of the risks to human health and the **environment** from the mercury.

Further information on the Minamata Convention can be found on the United Nations Environment Programme website at: www.mercuryconvention.org/en

9.8 Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants (the Stockholm Convention) is a global treaty to protect human health and the **environment** from chemicals that remain intact in the **environment** for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the **environment**.

Exposure to POPs can lead to serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damage to the nervous system.

Given their long-range mobility, no one government acting alone can protect its citizens or its **environment** from POPs.

In response to this global problem, the Stockholm Convention, which was adopted in 2001 and entered into force in 2004, requires its parties to take measures to eliminate or reduce the release of POPs into the **environment**.

Further information on the Stockholm Convention can be found on the United Nations Environment Programme website at www.pops.int/.

10. DISPOSAL OF HAZARDOUS MATERIALS

Prior to disposal, all hazardous materials must be assessed, classified and managed in accordance with either:

- the Environmental Standards: Classification of Liquid and Non-liquid Wastes
- as a regulated waste if generated through activities covered by an **environmental authorisation** or
- the Movement of Controlled Waste between States and Territories **NEPM**.
-

Further information on these requirements can be found on the Access Canberra website at www.accesscanberra.act.gov.au.

Further information on the disposal of certain hazardous wastes can be found on the Transport Canberra and City Services website at www.cityservices.act.gov.au/recycling-and-waste/drop-off/hazardous-waste.

The disposal requirements for certain hazardous materials are outlined below.

10.1 Scheduled wastes

Scheduled **wastes** such as **PCBs** and **OCPs** require special treatment technologies for their destruction.

10.1.1 Polychlorinated biphenyls

PCB-contaminated oil and equipment that has been removed from use can be transported to a facility holding an environmental authorisation for the treatment of **PCB** waste material for reprocessing and recycling. The interstate transportation of this **waste** falls under the provision of the Controlled Waste **NEPM**.

10.1.2 Organochlorine pesticides

OCPs that have been collected and removed from use must be transported interstate for destruction. The interstate transportation of this **waste** falls under the provision of the Controlled Waste **NEPM**.

*Note: The transport of scheduled waste from one place in the ACT to another place in the ACT is a Class A **activity** which requires the transporter to hold an **environmental authorisation**. See Section 7.3.1.*

10.2 Asbestos

In the ACT asbestos **waste** is classified as an industrial waste and must be handled, transported and disposed of in accordance with the Work Health and Safety (How to Manage and Control Asbestos in the Workplace Code of Practice) Approval 2020 (the Code) and the **EPA** Information Sheet 5 – Requirements for Transport and Disposal of Asbestos Contaminated Wastes (the information sheet). The Code and information sheet set out how asbestos must be removed, packaged, transported and disposed of. The interstate transportation of this waste falls under the provision of the Controlled Waste **NEPM**.

The Code can be found on the Safe Work Australia website at www.safeworkaustralia.gov.au. The information sheet can be found on the Access Canberra website at www.accesscanberra.act.gov.au.

10.3 Liquid hazardous materials

There is no liquid **waste** disposal, and limited treatment, facilities in the ACT for commercial volumes. Most liquid **waste** of commercial volume are generally required to be transported interstate for disposal or treatment. The interstate transportation of this **waste** falls under the provision of the Controlled Waste **NEPM**.

For details of any liquid waste treatment facilities in the ACT contact the **EPA** by calling Access Canberra on 13 22 81.

It is not acceptable to dispose of these items through a drain, sewer or **stormwater system**, regardless of how small the volume

10.4 Domestic hazardous materials

Commonly used household chemicals include household cleaners, aerosol sprays, automotive supplies, paints, thinners, stains and varnishes, old art supplies, photographic chemicals, pool chemicals, pesticides and garden chemicals.

If misused or accidentally spilled, some of these chemicals are potentially hazardous to the **environment** and human health due to their corrosive, flammable or reactive properties.

Small quantities of unwanted/unused household chemicals can be dropped off free of charge at the Mugga Lane Resource Management Centre and Mitchell Resource Management Centre.

Larger and commercial quantities of waste chemicals can be disposed of through a private service provider. Service providers can be found at www.businessrecycling.com.au.

It is not acceptable to dispose of these items through a drain, sewer or **stormwater system**, regardless of how small the volume

10.5 Disposal of contaminated soil

In the ACT contaminated soil must be assessed and classified in accordance with the Environmental Standards: Classification of Liquid and Non-liquid Wastes.

Contaminated soil must be sampled and analysed in accordance with **EPA** Information Sheet 4 – Contaminated Soil – Requirements for disposal of Contaminated Soil. Further information on disposal of contaminated soil is detailed in the **Contaminated Sites EPP**.

The disposal or beneficial reuse of **contaminated** soil or soil from any potentially **contaminated** site requires **EPA** approval. For disposal to landfill the Notice of Application/Approval for Disposal to Landfill form must be completed. This form can be found on the Access Canberra website at www.accesscanberra.act.gov.au.

10.6 Disposal of Agricultural and veterinary chemical containers

DrumMUSTER is a national program that accepts empty Agvet chemical containers for recycling.

Remondis runs this collection service at the Mitchell Resource Management Centre. Collections are held on the first Thursday of each month between 10am and 12pm – by appointment only.

Contact Remondis on 02 6270 7700 to arrange an appointment for disposal.

For more information on container preparation and conditions visit the drumMuster website: www.drummuster.org.au/.

10.7 Disposal of persistent organic pollutants

The Stockholm Convention creates an obligation to safely dispose of **wastes** containing POPs. In most cases the **waste** must be disposed of so the POPs content is destroyed or irreversibly transformed. The only exception is if the POPs content is below the specified level and the **waste** can then be disposed of in an environmentally sound manner. The specified levels for the environmentally sound disposal of POPs are:

- Organochlorine pesticides, PCBs and HCB – less than 50 mg/kg (50 ppm or 0.005%)
- Dioxins – less than 15 µg TEQ/kg

10.7.1 Disposal facilities

Wastes containing POPs at levels higher than the specified levels must be disposed of at an authorised facility. There are no facilities authorised to destroy or irreversibly transform **wastes** containing POPs in the ACT. The facilities authorised to destroy or irreversibly transform **wastes** containing POPs in other Australian states and territories are listed below.

| <i>State</i> | <i>Facility</i> | <i>Technology</i> | <i>Waste/POPs treated</i> |
|-------------------|---|--|--|
| Queensland | Cleanaway Narangba Liquid Waste Services Geocycle Gladstone | Base catalysed decomposition Plasma arc Cement kiln co-incineration | Organochlorine pesticides, PCBs, HCB Organochlorine pesticides, HCB |
| Victoria | Cleanaway Laverton Technical Waste Services Renex | Plasma arc Hazardous waste incineration (The main technology used at this facility is pyrolysis, but incineration is the technology used to destroy POPs.) | Organochlorine pesticides, HCB Organochlorine pesticides, HCB |
| Tasmania | Geocycle Railton | Cement kiln co-incineration | Organochlorine pesticides, HCB |
| Western Australia | Entech-Renewable Energy Solutions | Gas-phase chemical reduction | Organochlorine pesticides, HCB |

10.7.2 Overseas destruction

Overseas destruction of wastes containing POPs may only be permitted if:

- Australia does not have the capacity and necessary facilities to destroy or irreversibly transform the POPs content of the waste in an environmentally sound or efficient manner
- the POPs content of the waste will be destroyed or irreversibly transformed in accordance with best environmental practice and best available techniques at the overseas destination
- movement of the waste does not endanger human health and the **environment**.

The Basel Convention sets out rules for the import and export of hazardous **wastes** and includes **wastes** containing POPs.

PART C: REFERENCE MATERIAL AND GLOSSARY

11. GUIDELINES AND OTHER RESOURCES

The following lists relevant publications at the time of preparing this EPP. From time to time these documents are updated; the most recent versions should be used.

11.1 Statutory Guidelines

Currently, there are no guidelines, standards or procedures prescribed under the Act or Regulations for hazardous materials other than the Environmental Standards: Classification of Liquid and Non-liquid Wastes and the Movement of Controlled Waste **NEPM**. Nonetheless, the guidelines and references listed below constitute a good reference source and should be used, as appropriate, for hazardous materials manufacture, supply, use, storage, transport and disposal in the ACT. If there are inconsistencies between any of these guidelines, the Standards and the Movement of Controlled Waste **NEPM**, the latter two prevail.

*Note: the Movement of Controlled Waste **NEPM** only deals with the movement of controlled waste across state/territory borders and does not provide guidance on the manufacture, supply, use, storage and disposal of hazardous materials or their transport within one state/territory. The Controlled Waste **NEPM** was developed to provide a nationally consistent approach to the movement of controlled wastes across jurisdictions.*

11.2 ACT Publications

Building and Construction Information Sheets

- Information Sheet No.1 – Minimum standard for submission of pollution control plans
- Information Sheet No.6 – Prevent pollution from concreting operations
- Information Sheet No.7 – Prevent pollution from painting

Waste Management and Hazardous Materials Information Sheets

- Information Sheet No.1 – Responsibilities of Controlled Wastes Producers
- Information Sheet No.2 – Responsibilities of Controlled Wastes Transporters
- Information Sheet No.3 – Responsibilities of Interstate Controlled Wastes Producers
- Information Sheet No.4 – Guide to Using a Waste Transport Certificate
- Information Sheet No. 5 – Requirements for the Transport and Disposal of Asbestos and Contaminated Wastes
- Information Sheet No.6 – Management of Small Scale Low Risk Soil Asbestos Contamination
- Information Sheet No.7 – Guidance for Undertaking Preliminary Contamination Investigations for Development or Lease Variation Purposes

Contaminated Sites Information Sheets

- Information Sheet No.1 – Decommissioning, Assessment and Audit of Sites Containing Above Ground or Underground Fuel Storage Tanks
- Information Sheet No.2 – Requirements for the Assessment and Validation of Former Service Station Sites in the ACT
- Information Sheet No.3 – Requirements for the Assessment and Validation of Sites Containing Above Ground or Underground Fuel Storage Tanks in the ACT
- Information Sheet No.4 – Requirements for Re-use and Disposal of Contaminated Soil
- Information Sheet No. 5 – Requirements for Transport and Disposal of Asbestos Contaminated Wastes
- Information Sheet No. 6 – Management of Small Scale, Low Risk Soil Asbestos Contamination
- Information Sheet No. 7 – Guidance for Undertaking Preliminary Contamination Investigation for Development Purposes

Other Industry Information Sheets

- Information Sheet No.2 – Auto Dismantlers
- Information Sheet No.6 – Mobile Carpet Cleaners

Other ACT documents

- Environmental Standards: Assessment and Classification of Liquid and Non-liquid Wastes
- Environmental Risk Assessment Guide for Business
- ACT Commercial Waste Industry Code of Practice
- Territory and Municipal Services – Procedure for the Management of Contaminated Assets
- Contaminated Sites Environment Protection Policy
- Environmental Guidelines for the Preparation of an Environmental Management Plan
- Environmental Guidelines for Service Station Sites and Hydrocarbon Storage
- Environmental Guidelines for the Preparation of an Environment Management Plan
- Environment Protection (Automotive Trades) Code of Practice
- Environmental Protection Guidelines for Construction and Land Development in the ACT
- General Environment Protection Policy
- Contaminated Sites Environment Protection Policy
- Water Quality Environment Protection Policy
- Separation Distance Guidelines for Air Emissions
- Water Quality Environment Protection Policy

11.3 ANZECC, ARMCANZ, ENHEALTH AND NHMRC Publications

- Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Australian and New Zealand Environment and Conservation Council & Agriculture and Resource Management Council of Australia and New Zealand, Paper No. 4, October 2000
- Financial Liability for Contaminated Sites Remediation: A Position Paper, Australian and New Zealand Environment and Conservation Council, 1994
- Guidelines for Groundwater Protection in Australia, Agriculture and Resources Management Council of Australia and New Zealand & Australian and New Zealand Environment and Conservation Council, 1995
- National Water Quality Management Strategy, Australian Drinking Water Guidelines 6, 2004, National Health and Medical Research Council, Natural Resources Management Ministerial Council, 2004
- Polychlorinated Biphenyls Management Plan, Australian and New Zealand Environment and Conservation Council, Canberra, April 2003
- Minimum Construction Requirements for Water Bores in Australia 3rd Edition, Agriculture and Resources Management Council of Australia and New Zealand, Australian and New Zealand Environment and Conservation Council & Agriculture and Resource Management Council of Australia and New Zealand, 2012
- Guidelines for the Assessment of On-Site Containment of Contaminated Soil, Australian and New Zealand Environment and Conservation Council 1999
- Management of Asbestos in the Non-occupational Environment, enHealth 2005

11.4 Australian Standards

- AS 4482.1: 2005 Guide to the investigation and sampling of sites with potentially contaminated soil – Part 1: Non-volatile and semi-volatile compounds
- AS 4482.2: 1999 Guide to the sampling and investigation of potentially contaminated soil - Part 2: Volatile substances
- AS 4361.2: 2017 Guide to lead paint management – Residential and commercial buildings
- AS/NZS 5667.11:1998: Water quality – Sampling – Guidance on sampling of groundwaters
- AS/NZS 5667.1:1998: Water quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples

11.5 NSW Publications

- Contaminated Land Guidelines: Consultants reporting on contaminated land, NSW EPA, 2020
- Contaminated Sites: Guidelines for Assessing Former Orchards and Market Gardens, NSW Department of Environment and Conservation, 2005
- Contaminated Sites: Guidelines for the Vertical Mixing of Soil on Former Broad-Acre Agricultural Land, NSW EPA, 1995
- Contaminated Sites: Sampling Design Guidelines, NSW EPA, 1995
- Guidelines for the Assessment and Management of Groundwater Contamination, NSW Department of Environment and Conservation, 2007
- Guidelines on the Duty to Report Contamination under the *Contaminated Land Management Act 1997*, NSW DECC, 2015
- Guidelines for the NSW Site Auditor Scheme (3rd edition), NSW EPA, 2017
- Resource Sheet 3: Site assessment, NSW EPA, 2015
- UPSS Technical Note: Site Validation Reporting, NSW Department of Environment, Climate Change and Water, 2010.

11.6 Victorian Publications

- Groundwater Sampling Guidelines: Publication 669, EPA Victoria, 2000
- Hydrogeological Assessment (Groundwater Quality) Guidelines, Publication 668, EPA Victoria, 2006
- Sampling and Analysis of Waters, Wastewaters, Soils and Wastes, Publication IWRG701, EPA Victoria, 2009

11.7 WA Publications

- Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia, WA Department of Health, 2021

11.8 Other References

- CRC CARE Technical Reports www.crccare.com/publications/technical-reports
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, March 1989, www.basel.int/.
- Intergovernmental Agreement on the Environment, May 1992, www.environment.gov.au/about-us/esd/publications/intergovernmental-agreement.
- Minamata Convention on Mercury, August 2017, www.mercuryconvention.org.
- National Environment Protection (Assessment of Site Contamination) Measure, December 1999, www.nepc.gov.au/nepms/assessment-site-contamination.
- Montreal Protocol on Substances that Deplete the Ozone Layer, September 1987, www.awe.gov.au/environment/protection/ozone/montreal-protocol
- National Environment Protection (Movement of Controlled Waste between States and Territories) Measure, June 1998, www.nepc.gov.au/nepms/movement-controlled-waste.
- National Environment Protection (National Pollutant Inventory) Measure, February 1998, www.nepc.gov.au/nepms/national-pollutant-inventory.
- Work Health and Safety (How to Manage and Control Asbestos in the Workplace Code of Practice) Approval 2020, www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice.
- National Occupational Health & Safety Commission – National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHC:2006(1990)] www.safeworkaustralia.gov.au/system/files/documents/1702/nationalstandard_syntheticmineralfibres_nohsc1004-1990_pdf.pdf.
- National Standard for Environmental Risk Management of Industrial Chemicals, www.environment.gov.au/protection/chemicals-management/national-standard.

- Organochlorine Pesticides Waste Management Plan, July 1999, www.ocp.net.au/heritagemanagementdocuments.
- PFAS National Environmental Management Plan, January 2020, www.environment.gov.au/protection/publications/pfas-nemp-2.
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, September 1998, www.pic.int.
- Stockholm Convention on Persistent Organic Pollutants, May 2001, www.chm.pops.int.

12. GLOSSARY OF TERMS

The definitions of the terms listed in this glossary are provided to assist in reading this EPP.

| <i>Term</i> | <i>Definition</i> |
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| Agvet chemical | An agricultural chemical product under the Agvet Code, section 4, or a veterinary chemical product under the Agvet Code, section 5. |
| Agvet Code | The Agvet Code of the ACT, under the <i>Agricultural and Veterinary Chemical Code Act 1994</i> (Cwlth) as in force from time to time. |
| APVMA | The Australian Pesticides and Veterinary Medicines Authority (APVMA) is an Australian Government authority responsible for the assessment and registration of pesticides and veterinary medicines and for their regulation up to and including the point of retail sale. |
| Controlled Waste | As defined in the NEPM Movement of Controlled Waste between States and Territories, schedule A, list 1 (waste categories) provided it has one or more of the characteristics listed in the NEPM, schedule A, list 2 (characteristic of controlled wastes). |
| Declared agvet chemical | The EPA may, by notifiable instrument, declare a restricted agvet chemical product, or an agvet chemical product containing a schedule 7 poison to be a declared agvet product. Such declarations are relevant for determining when certain offences may apply under the Regulation. |
| Emergency Plan | A plan to deal with the foreseeable but unplanned entry into the environment of unauthorised pollutants. |
| Environmental Authorisation | A form of licence under Part 8 of the Act to conduct an activity (Schedule 1 of the Act) that has a significant potential to cause environmental harm and sets out conditions under which the activity must be conducted. |
| Environmental Harm | Any impact on the environment as a result of human activity that has the effect of degrading the environment (whether temporary or permanently). |
| Environmental Protection Agreement | A written agreement with the EPA where the person is, or proposes to conduct an activity listed in Schedule 1 of the Act or for the purposes of giving effect to the objects of this Act. |
| Environment Protection Order | An instrument, issued by the EPA where the EPA is satisfied that a person has breached the Act or an authorisation condition, specifying that certain actions be or not be taken. |
| EPA | Environment Protection Authority—a statutory office established under Part 2 of the Act to administer the Act. |
| EPP | Environment Protection Policy—a documents prepared in accordance with the Act and relevant best practice, setting out— (a) guidelines to which the EPA must have regard in administering the Act generally or in relation to specified functions of the EPA; or (b) guidelines for effective environment protection and management within a particular industry or for the community generally; or |

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| | (c) matters that the EPA may take into account in relation to the making of a decision in the exercise of a discretion under this Act. |
| Financial assurance | A financial assurance (e.g. bank guarantee, bond) provided to the EPA by an authorisation holder where there is a likelihood that action will be required to remedy environmental harm caused by the authorised activity. |
| Material Environmental Harm | Environmental harm that: <ul style="list-style-type: none"> • is significant, including environmental harm that becomes significant over time, due to its frequent reoccurrence or due to its cumulative effect with other relevant events • is to an area of high conservation value, other than harm that is trivial or negligible • results in loss or damage to property to the value of more than \$5,000 • results in necessary remedial action costing more than \$5,000. |
| NEPC | National Environment Protection Council—a council of Commonwealth, state and territory ministers established under complementary legislation (the <i>National Environment Protection Act 1994</i> (Commonwealth) in the ACT) to make and monitor the implementation of NEPMs. |
| National Pollutant Inventory | A geographically-based database of pollutant emissions to the environment. |
| NEPM | National Environment Protection Measure—a broad framework-setting statutory instrument defined in the <i>National Environment Protection Act 1994</i> which outlines agreed national objectives for protecting particular aspects of the environment. |
| Pest control chemicals | Agricultural and veterinary chemicals (including chemicals often called pesticides) as defined under the <i>Commonwealth Agricultural and Veterinary Chemicals (Code) Act 1994</i> . |
| Regulated waste | As defined in Schedule 1, Section 1.1(A) of the Act means waste that is, or contains 1 or more of the following kinds of waste: <ol style="list-style-type: none"> (a) hazardous waste (b) group A waste (c) group B waste (d) group C waste (e) industrial waste |
| Scheduled waste | Scheduled waste is chemicals that are: <ul style="list-style-type: none"> • organic in nature • resistant to degradation by chemical, physical or biological means • toxic to humans, other animals, vegetation or aquatic life • bioaccumulative in humans, plants and animals. <p>These chemicals can be divided into 3 main groups—PCBs (polychlorinated biphenyls), HCB (hexachlorobenzene) and OCPs (organochlorine pesticides). Any waste that contains quantities and concentrations of these chemicals in excess of specified thresholds is classed as a scheduled waste.</p> |

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| Serious Environmental Harm | <p>Environmental harm that:</p> <ul style="list-style-type: none">• is very significant including environmental harm that becomes very significant over time, or due to its frequent recurrence or due to its cumulative effect with other relevant events• is to an area of high conservation value and is significant including environmental harm that becomes significant over time, or due to its frequent recurrence or due to its cumulative effect with other relevant events• results in loss or damage to property to the value of more than \$50,000• results in necessary remedial action costing more than \$50,000. |
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