**EXPLANATORY STATEMENT**

Issued by the Minister for the Environment and Water

*Industrial Chemicals Environmental Management (Register) Act 2021*

*Industrial Chemicals Environmental Management (Register) Principles 2022*

**Authority**

The *Industrial Chemicals Environmental Management (Register) Principles 2022* (the Principles) are made under subsection 23(1) of the *Industrial Chemicals Environmental Management (Register) Act 2021* (the ICEMR Act).

Subsection 23(1) of the ICEMR Act provides that the Minister may, by legislative instrument, determine principles to be complied with by the Minister in making, varying or revoking scheduling decisions for relevant industrial chemicals.

**Purpose**

The purpose of the Principles is to determine principles to be complied with by the Minister in making, varying or revoking scheduling decisions for relevant industrial chemicals.

Subsection 13(1) of the ICEMR Act provides that the Minister must not make a scheduling decision for a relevant industrial chemical unless the decision-making principles are in force. Subsection 13(2) of the ICEMR Act provides that in making, varying or revoking a scheduling decision, the Minister must comply with the decision-making principles.

Section 7 of the ICEMR Act defines the decision-making principles as the instrument made under subsection 23(1) and includes such an instrument as varied under subsection 23(2).

**Background**

The ICEMR Act establishes a national framework to manage the ongoing import, export, manufacture, use, handling, and disposal of industrial chemicals, to reduce impacts on the environment and limit people's exposure to industrial chemicals.

In July 2015, the Commonwealth, States and Territories agreed to establish a National Standard for the Environmental Risk Management of Industrial Chemicals (the National Standard – now known as the Industrial Chemicals Environmental Management Standard, or IChEMS). The National Standard was intended to provide for a consistent, nation-wide approach to managing the risks that industrial chemicals may pose to the environment.

The ICEMR Act provides the legislative basis for establishing the National Standard by enabling the Minister to:

* make scheduling decisions in relation to an industrial chemical. A scheduling decision can categorise an industrial chemical and set out the controls applicable to the import, export, manufacture, use, handling, and disposal of an industrial chemical. Controls may include restrictions or prohibitions on any of these activities; and
* establish, by legislative instrument, a register of scheduling decisions which will record all scheduling decisions for industrial chemicals (the Register).

Scheduling decisions will not be enforceable in and of themselves. Following the establishment of this legislative framework, the Commonwealth, States and Territories will be responsible for implementation and enforcement of the scheduling decisions, recorded in the Register, within their jurisdictions. This will drive national consistency in the management of industrial chemicals through a more streamlined, transparent, efficient, and predictable approach to environmental risk management, providing better protection for the environment.

The ICEMR Act also enables the Minister to establish, by legislative instrument, decision-making principles that must be complied with when making, varying or revoking a scheduling decision. The purpose of the Principles is to set out criteria for categorising industrial chemicals into schedules according to their level of concern to the environment. The Principles are also intended to establish general guidance to decision-makers as to the appropriate controls for a particular industrial chemical based on its level of concern to the environment.

These restrictions on the Minister’s powers in respect of scheduling decisions are appropriate, given that the scheduling decisions are intended to give effect to an intergovernmental scheme agreed between all Australian jurisdictions. The Principles have been prepared in consultation with States and Territories as part of the implementation of that agreement. In addition, requiring the Minister to comply with the Principles will ensure that scheduling decisions are based on scientific and technical analysis of the relevant risks, and are consistent, transparent and predictable.

**Impact and effect**

Part 2 of the Principles sets out the criteria, or risk characteristics, for deciding which Schedule of the Register an industrial chemical and (where relevant) its proposed use, should be listed in, according to its level of environmental concern.

It is intended there will be 7 schedules in the Register. Risk characteristics are detailed for each of the intended 7 schedules. If an industrial chemical, or a particular use of the industrial chemical, is classified as having the risk characteristics for a particular Schedule of the Register, the Minister is required to list the industrial chemical, or use of the industrial chemical, in that schedule. Chemicals in higher schedules will usually require more active management of environmental risks, including in some cases the imposition of prohibitions or restrictions on the import, export, manufacture, or use of the chemical.

The Principles will ensure that scheduling decisions made under the ICEMR Act have the following effect:

* industrial chemicals of greatest environmental concern will be listed in Schedules 6 and 7 to the Register. These chemicals are likely to cause serious or irreversible harm to the environment and should be replaced with less harmful alternatives wherever possible. Such chemicals without an essential use will generally be listed in Schedule 7, while chemicals with an essential use will generally be listed in Schedule 6.
* industrial chemicals listed in Schedules 2 to 5 to the Register will be of intermediate concern to the environment. These chemicals will be allocated to higher schedules as the environmental risks increase. For example, a chemical could have Schedule 5 risk characteristics if the chemical is likely to cause harm to the environment if used in Australia, and is bioaccumulative and toxic, but not persistent in the environment.
* industrial chemicals of lowest concern will be listed in Schedule 1 to the Register. These chemicals do not have risk characteristics that would place them in a higher schedule and are therefore of lowest concern to the environment.

The risk characteristics are primarily scientific and technical criteria that can be addressed using information considered during an environmental risk assessment. These criteria relate to the level of environmental concern arising from the inherent characteristics of an industrial chemical and (where relevant) the proposed use of the chemical. This includes information such as whether a chemical is persistent in the environment, whether it is bioavailable, how toxic it is and the predicted concentration in the environment. Where appropriate, the risk characteristics are based on international approaches to hazard classification, as set out in the Globally Harmonized System of Classification and Labelling of Chemicals.

The risk characteristics in the Principles have been developed and refined after extensive consultation with stakeholder groups and States and Territories. They are aligned with the criteria previously set out in publicly available policy documents relating to the National Standard.

Each Schedule of the Register (except for Schedule 1) also requires the Minister be satisfied that the chemical poses a particular level of harm to the environment. Schedule 1, for very low concern chemicals, is defined by exception – a chemical can only be placed in Schedule 1 if the level of environmental risk is so low that it does not belong in any other schedule.

Different uses of the same industrial chemical could be listed in different Schedules of the Register. This is because each proposed use of an industrial chemical may pose different risks to the environment, which will inform whether it meets the risk characteristics for a particular schedule.

A scheduling decision can also include establishing appropriate controls that should be applied to minimise risks that the chemical poses, or may pose, to the environment (including people and communities). This can include specifying that export, import, manufacture, or use of a chemical is prohibited or restricted. The Minister can also decide on appropriate risk management measures to address the risks posed by the industrial chemical or its uses. Part 3 of the Principles provides guidance as to how risk management measures and other controls will generally be applied to industrial chemicals that are listed in different schedules.

The stringency of risk management measures and other controls will generally increase the higher the schedule. This means chemicals listed in higher schedules will generally have more specific and stringent risk management measures than chemicals listed in lower schedules. For example, a chemical listed in Schedule 6 or 7 will generally be required to be prohibited from import, export, manufacture, and use, except for in very specific circumstances or, for Schedule 6 chemicals, for a specified essential use. In contrast, a chemical listed in an intermediate schedule may only have risk management measures concerning use, handling, or disposal, while a chemical in a lower schedule may be subject to no or very minor controls.

**Disallowance and sunsetting**

The Principles are exempt from disallowance and sunsetting requirements under the *Legislation Act 2003* (Legislation Act). This is because the Principles are made under the ICEMR Act, that facilitates the establishment and operation of an inter-governmental scheme involving the Commonwealth and the States and Territories and authorises the Principles to be made for the purposes of that inter-governmental scheme.

Subsections 44(1) and 54(1) of the Legislation Act respectively provide that section 42 (concerning disallowance) and Part 4 of Chapter 3 (concerning sunsetting) of that Act do not apply in relation to a legislative instrument, or a provision of a legislative instrument, if the enabling legislation for the instrument facilitates the establishment or operation of an intergovernmental body or scheme involving the Commonwealth and one or more States, and authorises the instrument to be made by the body, or for the purposes of the body or scheme.

While this means the Principles will be subject to reduced parliamentary scrutiny, this is appropriate as the Commonwealth Parliament should not be able to unilaterally disallow instruments that are part of a multilateral scheme; nor (for the same reasons) should such instruments be able to sunset.

**Consultation**

A draft of the Principles was released for public consultation and consultation with State and Territory Environment Ministers in March 2022 consistent with the requirements of sections 24 and 25 of the ICEMR Act.

Ten submissions were received on the consultation draft of the Principles, including two submissions from the Victorian and NSW governments.

The submissions engaged with the detail of the Principles and provided feedback on both the technical criteria of the Principles and their policy implications.

The issues raised were addressed through changes to the draft Principles and through developing policies which will be communicated as part of Principles guidance material.

This statutory consultation built on extensive previous consultation with stakeholder groups and States and Territories. This included an earlier draft of the instrument that was released alongside the exposure draft of the ICEMR Act in early 2020, and consultation on the publicly available policy documents relating to the National Standard.

**Details and operation**

Details of the Principles are set out in the Attachment.

The Principles commence on the day after they are registered on the Federal Register of Legislation.

**Other**

The Principles are a legislative instrument for the purposes of the Legislation Act.

As the Principles are exempt from disallowance, in accordance with subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* a Statement of Compatibility with Human Rights is not required.

**ATTACHMENT**

***Details of the Industrial Chemicals Environmental Management (Register) Principles 2022***

**Part 1 - Preliminary**

**Section 1 – Name**

1. Section 1 provides that the name of the instrument is the *Industrial Chemicals Environmental Management (Register) Principles 2022* (the Principles).

**Section 2 - Commencement**

1. Section 2 provides that the Principles commence on the day after the instrument is registered on the Federal Register of Legislation.
2. The note below the table provides that the table relates only to the provisions of the Principles as originally made. It will not be amended to deal with any later amendments of the Principles. The purpose of this note is to clarify that the commencement of any subsequent amendments is not reflected in the table.
3. Subsection 2(2) clarifies that any information in column 3 of the table is not part of the Principles. Information may be inserted in this column, or edited in this column, in any published version of the Principles. For example, the date the Principles commenced will be inserted in this column once that has occurred.

**Section 3 - Authority**

1. Section 3 provides that the Principles are made under subsection 23(1) of the *Industrial Chemicals Environmental Management (Register) Act 2021* (ICEMR Act).

**Section 4 - Definitions**

1. Section 4 defines a number of key terms for the Principles. These terms include *listing decision*, *assessed use*, *Australian PBT criteria*, *GHS, endocrine disruptor* and *per- and polyfluoroalkyl substance*. Paragraphs 8 to 14 below explain the meaning of these terms in the order they appear in the substantive sections of the Principles, so as to better highlight overlapping concepts and improve clarity.
2. The note in section 4 explains that a number of other terms used in the Principles have the same meaning as those terms have in the ICEMR Act. This includes *end use*, *environment*, *Register*, *relevant industrial chemical* and *scheduling decision*.
3. *Listing decision* is defined, for a relevant industrial chemical, as a scheduling decision for the chemical that is, or includes, a decision to list the chemical in a Schedule of the Register. In other words, a listing decision is a kind of scheduling decision that is made under paragraph 11(3)(a) of the ICEMR Act. A listing decision under paragraph 11(3)(a) must be made for a chemical before decisions under paragraphs 11(3)(b) (concerning specific controls to be imposed on the chemical) can be made for that chemical. This is because under the Principles, the particular schedule that a chemical is listed in will determine the parameters for the controls that can be imposed on that chemical. Listing decisions are governed by the requirements in Part 2 of the Principles.
4. The term *Australian PBT Criteria* refers to the document titled *Australian Environmental Criteria for Persistent, Bioaccumulative and/or Toxic Chemicals* published by the Environment Department. This document defines the terms *persistent*, *bioaccumulative* and *persistent, bioaccumulative and toxic*, which are key risk characteristics for listing chemicals in Schedules of the Register, particularly in relation to higher concern chemicals to be listed in Schedules 5 to 7. The Australian PBT Criteria is a technical document, reflecting the current state of scientific knowledge concerning these risk characteristics and the harm to the environment that is likely to eventuate from chemicals with such characteristics. The Australian PBT Criteria is incorporated as existing on the commencement of the Principles, as permitted by subsection 23(3) of the ICEMR Act. This is appropriate, as the Australian PBT Criteria has been subject to consultation with jurisdictions and industry. Given its importance to the scheme, if the document were to be changed in the future, it is appropriate that the changes also be subject to consultation; this will occur as part of the statutory requirements for amending the Principles. The Australian PBT Criteria is available on the Environment Department’s website ([www.dcceew.gov.au](http://www.dcceew.gov.au)) for any person to download free of charge.
5. An assessed use for a relevant industrial chemical means an end use for the chemical that has been considered in either a Commonwealth risk assessment or a risk assessment undertaken by a State or Territory government body, a foreign government body or a public international organisation. This term is relevant to the listing decision for a relevant industrial chemical, as the criteria for listing a chemical in Schedules 2 to 5 involve consideration of the relevant assessed use of the chemical. A chemical may have more than one assessed use (whether from the same risk assessment or from multiple risk assessments). In such cases, the chemical may be listed in multiple Schedules of the Register by reference to the different assessed uses. Conversely, the chemical may be listed multiple times in the same Schedule of the Register by reference to the different assessed uses. Whether different assessed uses of an industrial chemical are listed in the same or different schedules will depend on the extent to which the different uses pose different risks to the environment. Risk management measures may be imposed on any uses of an industrial chemical, not just the assessed use that has been relied on for listing the chemical.
6. The term *GHS* refers to the document titled *Globally Harmonised System of Classification and Labelling of Chemicals* published by the United Nations. This document is incorporated as existing from time to time. A number of terms used in the Principles take their meaning from the GHS, including *bioavailable*, *harmful to aquatic life with acute effects*, *harmful to aquatic life with long lasting effects*, *toxic to aquatic life with acute effects*, *toxic to aquatic life with long lasting effects*, *very toxic to aquatic life with acute effects* and *very toxic to aquatic life with long lasting effects*.
7. The GHS is a technical scientific document agreed at an international level and reflects the most up to date scientific knowledge in this field. It also reflects the classification system used in the majority of risk assessments that have been carried out on industrial chemicals. Adopting the GHS terminology in the risk characteristics set out in Part 2 of the Principles allows the Minister to use the information derived from risk assessments to appropriately categorise industrial chemicals according to their likely harm to the environment. As the GHS is regularly updated by the United Nations, it is appropriate that it be incorporated as existing from time to time (as permitted by subsection 23(3) of the ICEMR Act) as this will ensure that scheduling decisions are based on the most up to date scientific information. The current version of the GHS is available on the United Nations website ([www.un.org](http://www.un.org)) free of charge.
8. The term *endocrine disruptor* is defined as an exogenous substance or mixture that alters the function or functions of the endocrine system and causes adverse effects in an intact organism or its progeny or populations. This definition aligns with Organisation for Economic Co-operation and Development (OECD) guidance on evaluating chemicals for endocrine disruption using standard test guidelines and the OECD conceptual framework.
9. The term *per- and polyfluoroalkyl substance* is defined to have the same meaning as in the document titled *Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance* published by the OECD (the OECD document). The OECD document is a technical scientific document agreed at an international level and reflects the most up to date scientific knowledge in this field. It is incorporated as existing on the date of the commencement of the Principles, as permitted by subsection 23(3) of the ICEMR Act and is available on the OECD website free of charge.

**Section 5 – Purpose of this instrument**

1. Section 5 provides that the purpose of the instrument is to determine principles that the Minister must comply with in making, varying or revoking scheduling decisions for relevant industrial chemicals.
2. This reflects the requirement in section 13 of the ICEMR Act. This limitation on the Minister’s decision-making powers is appropriate, as scheduling decisions are intended to give effect to an intergovernmental scheme agreed between all Australian jurisdictions. In addition, the decision-making principles have been prepared in consultation with States and Territories as part of the implementation of that agreement. Requiring the Minister to comply with the decision-making principles will also ensure that scheduling decisions are based on scientific and technical evidence, and are consistent, transparent, and predictable.

**Part 2 – Risk characteristics of a relevant industrial chemical**

1. Paragraph 11(3)(a) of the ICEMR Act has the effect that a decision to list a relevant industrial chemical in a particular Schedule or Schedules the Register is a kind of *scheduling decision*.
2. It is intended that all industrial chemicals for which a scheduling decision is made will be listed in one or more Schedules of the Register. Listing a chemical in a particular schedule will indicate the level of concern it poses to the environment. Part 2 of the Principles (sections 6 to 13) set out the criteria (risk characteristics) of which the Minister must be satisfied in order to list a relevant industrial chemical in a particular schedule. This means that the appropriate schedule (or schedules) for a particular industrial chemical will depend on the risk characteristics of that chemical. This would be determined by reference to both the inherent characteristics of the chemical and, in many cases, its assessed use.
3. The schedule the chemical is listed in will then determine the general rules that will, under Part 3 of the Principles, apply to making, varying or revoking other scheduling decisions for that chemical (including any potential controls on the import, export, manufacture or use of the chemical).
4. Scheduling also provides information on the relevant risks of chemicals. This information can be used by industry to choose less harmful chemicals, and by regulators to support targeted and risk-proportionate action.
5. Part 2 of the Principles has the effect that industrial chemicals that are listed in Schedules 2, 3, 4 or 5 to the Register will be listed in the relevant schedule by reference to a particular end use (the assessed use). This may mean that some industrial chemicals are listed in more than one Schedule of the Register by reference to different assessed uses. This is appropriate because it will generally be the use to which an industrial chemical is put that determines the level of concern that chemical poses to the environment, and that has been assessed in a risk assessment (such as a Commonwealth risk assessment undertaken pursuant to the *Industrial Chemicals Act 2019*).
6. In contrast, industrial chemicals that are listed in Schedules 6 or 7 or Schedule 1 will not be listed by reference to a particular end use. Rather, it is considered that these chemicals pose a sufficiently high (or low, as the case may be) risk to the environment regardless of use.

**Section 6 – Minister must consider risk characteristics of a relevant industrial chemical**

1. Subsection 6(1) requires the Minister, in making, varying, or revoking a listing decision for a relevant industrial chemical, to consider whether the chemical has:
   * Schedule 7 risk characteristics; or
   * Schedule 6 risk characteristics; or
   * Schedule 5 risk characteristics; or
   * Schedule 4 risk characteristics; or
   * Schedule 3 risk characteristics; or
   * Schedule 2 risk characteristics; or
   * Schedule 1 risk characteristics.
2. Sections 7 to 13 of the Principles set out the risk characteristics for each of the 7 Schedules of the Register.
3. Subsection 6(2) has the effect that if the Minister is satisfied that the relevant industrial chemical has risk characteristics provided for a particular Schedule of the Register, the Minister is required to list the chemical in that schedule.
4. This means the process for determining the appropriate schedule to list a particular industrial chemical, or a particular use of an industrial chemical, will start at the highest schedule, Schedule 7. The Minister is required to assess the chemical, or use of the chemical, against the criteria (set out in sections 7 to 13) for each of the schedules. When deciding to list a chemical in a Schedule of the Register, the Minister must be satisfied that the chemical, or use of the chemical, does not meet the criteria for a higher schedule. This is a precautionary approach to decision making, which will ensure that chemicals are assigned to the highest schedule that is appropriate based on the available information.
5. As noted above, a *listing decision* for a relevant industrial chemical is defined in section 4 of the Principles as a scheduling decision that is, or includes, a decision to list the chemical in a Schedule of the Register (i.e. a scheduling decision under paragraph 11(3)(a) of the ICEMR Act).
6. The requirements in section 6 apply to a *listing decision*, rather than the broader *scheduling decision,* because the Minister is not required to reconsider the appropriate schedule for an already-listed chemical when making, varying or revoking another kind of scheduling decision for that chemical (such as a decision to add, amend or remove one or more risk management measures for an already-listed chemical).
7. This does not mean that the Minister cannot reconsider the schedule an industrial chemical is listed in at any time; only that they are not required to do so merely because they are making a different scheduling decision that has the effect of amending other aspects of the chemical’s entry on the Register.
8. The note following subsection 6(2) explains that a relevant industrial chemical may be listed in more than one Schedule of the Register and references subsections 11(3) and 11(5) of the ICEMR Act.

**Section 7 – When a relevant industrial chemical has Schedule 7 risk characteristics**

1. Section 7 sets out the risk characteristics of which the Minister must be satisfied in order to list an industrial chemical in Schedule 7 to the Register.
2. Schedule 7 chemicals are intended to be phased out from use in Australia, on the basis that they pose a high risk to the environment and, unlike Schedule 6 chemicals, are not considered to have an essential use in Australia. Part 3 of the Principles (see section 14) makes it clear that Schedule 7 chemicals should only be able to be used in Australia in very limited circumstances.
3. Subsection 7(1) has the effect that, in order for the Minister to list a chemical in Schedule 7 to the Register, the Minister must be satisfied that all three of the criteria outlined in paragraphs 7(1)(a), (b) and (c) have been met.
4. To meet the criterion at paragraph 7(1)(a), the Minister must be satisfied that at least one of the following ‘harm criteria’ apply:
   * the chemical is likely to cause serious or irreversible harm to the environment if used, stored, or disposed of in Australia; or
   * the chemical is persistent, bioaccumulative and toxic (PBT); or
   * a substance that is reasonably likely to form during or after storage or disposal of the chemical, or as a by-product of the use, storage or disposal of the chemical (a chemical-related substance) is PBT.
5. The purpose of these harm criteria being alternatives is to allow chemicals that pose a serious or irreversible risk to the environment to be listed in Schedule 7. Whether a chemical is PBT is assessed in accordance with the Australian PBT criteria, which is incorporated by reference into the Principles in section 4. It is expected that most of these chemicals will meet the formal PBT criteria, but some may have not been subject to a formal PBT assessment, or may have other characteristics that are recognised as posing a serious or irreversible risk to the environment. For example, a chemical listed on the Stockholm Convention on Persistent Organic Pollutants or Minamata Convention on Mercury would likely be considered to cause serious or irreversible harm, even if it did not meet the Australian PBT criteria.
6. PBT chemicals are of particular concern to the environment as they persist for long periods, accumulate in biota, and could give rise to adverse effects after a greater time and at a greater distance from the source than chemicals without PBT properties. Also concerning is that a cessation of emissions of these chemicals will not necessarily result in a reduction in levels in the environment. That is, their effects following release may be essentially irreversible. In addition, because exposure to PBT chemicals is long-term, effects may not be identified in the short term, or even over a generation. Due to the combination of PBT characteristics, a ‘safe’ concentration may be impossible to determine.
7. Where a chemical satisfies the harm criteria in paragraph 7(1)(a), paragraph 7(1)(b) has the effect that the Minister can only list the chemical in Schedule 7 if satisfied that the chemical does not have an essential use in Australia. Subsection 7(2) sets out matters the Minister is required to consider when deciding whether the chemical has an essential use in Australia. These matters are:
   * whether it is likely that the chemical is currently used in Australia;
   * whether the chemical has an end use that is necessary for a medical, veterinary, defence, national security, public safety, industrial safety, economic or environmental purpose;
   * whether there are viable alternatives to the chemical for one of the above end uses;
   * Australia’s international obligations in respect of the chemical (if any);
   * any other matters the Minister considers relevant.
8. Allowing the Minister discretion to decide whether the chemical has an essential use in Australia having regard to these factors will allow the Minister to phase out chemicals that are particularly harmful to the environment as appropriate, while also taking into account important social and economic factors. It will also allow the concept of an essential use for an industrial chemical to be revisited when circumstances change. For example, a viable alternative may later come onto the market that removes the necessity to use a harmful chemical for a medical purpose. This would allow a Schedule 6 chemical to be moved into Schedule 7 once the Minister is no longer satisfied that it has an essential use in Australia.
9. Allowing the Minister this discretion will also allow Australia to go further than its international obligations in respect of a chemical if it is considered appropriate. This is important as Australia seeks to be a world leader in the phasing out of environmentally harmful chemicals. As such, it will not necessarily be sufficient for an international convention to allow the use of a particular chemical that meets the harm criteria in paragraph 7(1)(a); if the Minister is not satisfied that the chemical has an essential use in Australia, the chemical must be listed in Schedule 7 (unless paragraph 7(1)(c) is not satisfied).
10. If the Minister is satisfied that a chemical meets the criteria in paragraph 7(1)(a) but is also satisfied that the chemical has an essential use in Australia, it will instead be listed in Schedule 6 to the Register (see section 8 below).
11. Paragraph 7(1)(c) provides a third criterion that must be satisfied before an industrial chemical can be listed in Schedule 7. Under paragraph 7(1)(c), the Minister must be satisfied that it is appropriate to list the chemical in Schedule 7 to the Register. This criterion allows the Minister flexibility to, for example, list a chemical that is PBT in a lower schedule if satisfied that, despite technically meeting the Australian PBT criteria, it does not pose a sufficiently high risk to the environment.

**Section 8 – When a relevant industrial chemical has Schedule 6 risk characteristics**

1. Section 8 sets out the risk characteristics of which the Minister must be satisfied in order to list an industrial chemical in Schedule 6 to the Register.
2. Subsection 8(1) has the effect that, in order for the Minister to list a chemical in Schedule 6 of the Register, the Minister must be satisfied that all three of the criteria outlined in paragraphs 8(1)(a), (b) and (c) have been met.
3. Schedule 6 chemicals pose the same environmental risks as Schedule 7 chemicals. As such, paragraph 8(1)(a) sets the same harm criteria as paragraph 7(1)(a), being that the Minister must be satisfied that at least one of the following is met:
   * the chemical is likely to cause serious or irreversible harm to the environment if used, stored, or disposed of in Australia; or
   * the chemical is PBT; or
   * a substance that is reasonably likely to form during or after storage or disposal of the chemical, or as a by-product of the use, storage or disposal of the chemical (a chemical-related substance) is PBT.
4. Again, PBT takes the meaning of the term in the Australian PBT criteria, which is incorporated by reference into the Principles in section 4.
5. The only difference between Schedule 7 and Schedule 6 chemicals is that to list a chemical in Schedule 6, the Minister must be satisfied that the chemical has an essential use in Australia (paragraph 8(1)(b)). The matters to consider when deciding whether a chemical has an essential use in Australia are listed in subsection 8(2). These matters are the same as those listed in subsection 7(2), being:
   * whether it is likely that the chemical is currently used in Australia;
   * whether the chemical has an end use that is necessary for a medical, veterinary, defence, national security, public safety, industrial safety, economic or environmental purpose;
   * whether there are viable alternatives to the chemical for one of the above end uses;
   * Australia’s international obligations in respect of the chemical (if any);
   * any other matters the Minister considers relevant.
6. In other words, whether an industrial chemical is listed in Schedule 7 or 6 will generally depend on the outcome of the Minister’s assessment as to whether the chemical has an essential use in Australia. When making this assessment, the Minister will be able to obtain advice from the independent Advisory Committee established under the ICEMR Act.
7. As with section 7, paragraph 8(1)(c) provides a third criterion that must be satisfied before an industrial chemical can be listed in Schedule 6. Under paragraph 8(1)(c), the Minister must be satisfied that it is appropriate to list the chemical in Schedule 6 to the Register. This criterion allows the Minister flexibility to, for example, list a chemical that is PBT in a lower schedule if satisfied that, despite technically meeting the Australian PBT criteria, it does not pose a sufficiently high risk to the environment. This outcome would mean use of the chemical in Australia would not be restricted to essential uses.

**Section 9 – When a relevant industrial chemical has Schedule 5 risk characteristics**

1. Section 9 sets out the risk characteristics of which the Minister must be satisfied to list an industrial chemical in Schedule 5 of the Register.
2. Schedule 5 chemicals are at the higher risk end of the scale of chemicals that are of intermediate concern to the environment. Schedule 5 chemicals will be listed by reference to particular end uses (assessed uses). This is consistent with the majority of risk assessments undertaken on industrial chemicals, which assess the chemical by reference to one or more proposed uses. Furthermore, different end uses of an industrial chemical may pose different risks to the environment and, as such, may require different risk management measures or other controls.
3. To list an industrial chemical in Schedule 5 of the Register, the Minister must be satisfied that the chemical meets the criteria in each of paragraphs 9(1)(a), (b) and (c).
4. Paragraph 9(1)(a) requires the Minister to be satisfied that the chemical does not have Schedule 7 risk characteristics or Schedule 6 risk characteristics. This reflects the policy that Minister should assess each chemical against the criteria from the highest schedule to lowest schedule, so as to ensure that chemicals are assigned to the highest schedule that is appropriate based on the available information.
5. Paragraph 9(1)(b) requires the Minister to be satisfied that the chemical, if used in Australia in accordance with a particular assessed use for the chemical (i.e. the end use that is being listed), is likely to cause harm to the environment.
6. The purpose of this ‘harm criteria’ is to ensure that all chemicals listed in this schedule pose a sufficiently high risk to the environment to make it appropriate to list the chemical in Schedule 5 to the Register. In addition, it ensures that chemicals that may meet the technical criteria in paragraph 9(1)(c), but for whatever reason are not likely to harm the environment, are not listed in a schedule with controls or risk management measures that do not reflect the environmental risk the chemical actually poses.
7. Paragraph 9(1)(c) requires the Minister to be satisfied that the chemical meets one of subsections 9(2), 9(3), 9(4), 9(5) or 9(6). These are the ‘technical criteria’ that can generally be addressed using information considered during an environmental risk assessment. These criteria relate to the level of environmental concern arising from both the inherent characteristics of the industrial chemical and the proposed use of the industrial chemical. These criteria have been developed and refined after extensive consultation with stakeholder groups. They are aligned with the criteria for Schedule 5 previously set out in publicly available policy documents relating to the National Standard for Environmental Risk Management of Industrial Chemicals (now known as IChEMS).
8. An industrial chemical satisfies subsection 9(2) if the chemical is:
   * bioaccumulative, and either persistent or an endocrine disruptor; or
   * persistent and toxic; or
   * bioaccumulative and toxic.
9. The terms *bioaccumulative and toxic*, *persistent and toxic*, *bioaccumulative* and *persistent* take the meaning of those terms in the Australian PBT criteria, which is incorporated into the Principles (see section 4).
10. The term *endocrine disruptor* is defined in section 4 as an exogenous substance or mixture that alters the function or functions of the endocrine system and causes adverse effects in an intact organism or its progeny or populations. These substances may cause adverse effects at very low concentrations, and cause infertility, reduced fertility or irreversible developmental abnormalities in organisms.
11. An industrial chemical satisfies subsection 9(3) if the chemical is both a per- and polyfluoroalkyl substance and an endocrine disruptor.
12. As defined in section 4, the term a *per- and polyfluoroalkyl substance* takes the same meaning as in the OECD document. Substances that are per- and polyfluoroalkyl substances are a diverse group of compounds resistant to oil, heat and water. The per and polyfluorinated portions of these substances are very persistent and resist degradation in the environment, generally requiring very high temperatures to break the molecule apart. Some of these substances can also bioaccumulate, which means their concentration increases over time, particularly in the blood and organs of organisms. Because of their properties, it is difficult to quantitatively or qualitatively assess the risk of per- and polyfluoroalkyl substances. Therefore, these substances are targeted for management to prevent excessive release to the environment.
13. An industrial chemical satisfies subsection 9(4) if:
    * the chemical is harmful, toxic, or very toxic to aquatic life, or is likely to have an adverse effect on non-aquatic organisms; and
    * any of the following apply:
      + the measured or predicted environmental concentration of the chemical exceeds, or would exceed, the acceptable level of the chemical for the environment if the chemical is used in Australia in accordance with the particular assessed use for the chemical; or
      + the chemical is bioaccumulative or persistent, and is either very toxic to aquatic life with acute effects, or very toxic to aquatic life with long lasting effects; or
      + the chemical is likely to be very toxic to aquatic life with long lasting effects and, if the chemical is used in Australia in accordance with the particular assessed use for the chemical, the chemical would be released into the environment.
14. The terms *harmful*, *toxic*, *very toxic*, *very toxic to aquatic life with acute effects* and *very toxic to aquatic life with long lasting effects* take the same meaning as in the GHS (section 4). The GHS is incorporated into the Principles as existing from time to time in section 4.
15. The effects to aquatic life are considered to be a proxy for the toxicity of an industrial chemical in the environment. Surface waters are the most likely sink for chemicals released through the sewer and into other compartments in the environment, whether it be through leaching from soils or becoming associated with water or particles in the atmosphere and returning to earth through rain. However, in some cases, substances can be harmful to other (non-aquatic) organisms if those organisms are exposed to them. For this reason, subsection 9(4) addresses harm to both aquatic life and non-aquatic organisms.
16. The predicted or measured environmental concentration of an industrial chemical is generally calculated in the risk assessment for that chemical. If the assessed concentration of the substance in the environment without additional controls is greater than or equal to the concentration predicted to cause harm to the environment, the chemical is more likely to have an adverse impact on the environment for the assessed use. Therefore, stricter management of the risks the chemical poses to the environment is required to ensure emissions to the environment are limited. For this reason, subsection 9(4) has the effect that chemicals with a predicted or measured environmental concentration that exceeds or would exceed the acceptable level for the environment will generally be listed in Schedule 5 to the Register.
17. An industrial chemical satisfies subsection 9(5) if it meets each of the following:
    * the chemical contains an inorganic component; and
    * the inorganic component is in a form that is, or could become, bioavailable if the chemical is used in Australia in accordance with the particular assessed use for the chemical; and
    * the chemical is likely to be either toxic to aquatic life with acute effects, toxic to aquatic life with long lasting effects, very toxic to aquatic life with acute effects, very toxic to aquatic life with long lasting effects, or is likely to accumulate causing adverse effects to the environment.
18. The terms *bioavailable*, *toxic to aquatic life with acute effects,* *toxic to aquatic life with long lasting effects*, *very toxic to aquatic life with acute effects* and *very toxic to aquatic life with long lasting effects to the environment* are defined in section 4 to take the same meaning as in the GHS.
19. Many environmental risk assessment methods have been developed for organic chemicals (carbon-based substances) and as such do not adequately consider the unique characteristics of metals and metalloids (inorganic species). However, some risk assessments assess inorganic species separately to organic substances or the organic component of a substance. Where this is the case, subsection 9(5) makes it clear that the chemical’s inorganic components will also be considered against the relevant risk characteristics to understand the risk of the chemical as a whole. For such components, the critical issue is whether it is, or could become, bioavailable once in the environment, as this is likely to increase the risk to the environment posed by the chemical. However, bioavailability is not of itself sufficient to list the chemical in Schedule 5; it is also necessary for one or more of relevant GHS hazard levels (toxic or very toxic to aquatic life with acute or long lasting effects) to be met.
20. An industrial chemical satisfies subsection 9(6) if the Minister believes, on reasonable grounds, that the chemical, if used in Australia in accordance with the particular assessed use for the chemical, will have a comparable effect on the environment as other chemicals listed (or likely to be listed) in Schedule 5, and is satisfied that it is appropriate to list the chemical in Schedule 5.
21. This last criterion provides the Minister with appropriate flexibility to list an industrial chemical in Schedule 5 even if it does not otherwise meet the technical criteria in subsections 9(2) to (5) but poses a comparable risk to the environment as other chemicals that do meet those criteria. This will ensure that harmful chemicals will be able to be regulated appropriately based on their likely effect on the environment, even if they have novel technical characteristics that do not fit into the more common categories.

**Section 10 – When a relevant industrial chemical has Schedule 4 risk characteristics**

1. Section 10 sets out the risk characteristics of which the Minister must be satisfied to list an industrial chemical in Schedule 4 to the Register.
2. Schedule 4 chemicals are considered to be of intermediate concern to the environment, but of a lower risk than Schedule 5 chemicals. Schedule 4 chemicals will be listed by reference to particular end uses (assessed uses). This is consistent with the majority of risk assessments undertaken on industrial chemicals, which assess the chemical by reference to one or more proposed uses. Furthermore, different end uses of an industrial chemical may pose different risks to the environment and, as such, may require different risk management measures or other controls.
3. To list an industrial chemical in Schedule 4 of the Register, the Minister must be satisfied that the chemical meets the criteria in each of paragraphs 10(1)(a), (b), (c) and (d).
4. Paragraphs 10(1)(a) and (b) require the Minister to be satisfied that the chemical does not have Schedule 7 risk characteristics or Schedule 6 risk characteristics and that the chemical, if used in accordance with a particular assessed use (i.e. the end use that is being listed), does not meet the criteria for Schedule 5. This reflects the policy that Minister should assess each chemical against the criteria from the highest schedule to the lowest schedule, so as to ensure that chemicals are assigned to the highest schedule that is appropriate based on the available information.
5. Paragraph 10(1)(c) requires the Minister to be satisfied that the chemical, if used in Australia in accordance with a particular assessed use for the chemical (i.e. the end use that is being listed), may cause harm to the environment.
6. The purpose of this ‘harm criteria’ is to ensure that all chemicals listed in this schedule pose a sufficiently high risk to the environment to make it appropriate to list the chemical in Schedule 4 to the Register. In addition, it ensures that chemicals that may meet the technical criteria in paragraph 10(1)(d), but for whatever reason are not likely to harm the environment, are not listed in a schedule with controls or risk management measures that do not reflect the environmental risk the chemical actually poses.
7. Paragraph 10(1)(d) requires the Minister to be satisfied that the chemical meets one of subsections 10(2), 10(3), 10(4) or 10(5). These are the ‘technical criteria’ that can generally be addressed using information considered during an environmental risk assessment. These criteria relate to the level of environmental concern arising from both the inherent characteristics of the industrial chemical and the proposed use of the industrial chemical. These criteria have been developed and refined after extensive consultation with stakeholder groups. They are aligned with the criteria for Schedule 4 previously set out in publicly available policy documents relating to the National Standard for Environmental Risk Management of Industrial Chemicals (now known as IChEMS).
8. An industrial chemical satisfies subsection 10(2) if the chemical is either bioaccumulative or an endocrine disruptor, or if the chemical is a per- and polyfluoroalkyl substance. Unlike for Schedule 5, which recognises the risks associated with combinations of these characteristics, the chemical only has to satisfy one of these options.
9. As noted above, the term *endocrine disruptor* is defined in section 4 as an exogenous substance or mixture that alters the function or functions of the endocrine system and causes adverse effects in an intact organism or its progeny or populations. In contrast (as defined in section 4) a chemical is a *per- and polyfluoroalkyl substance* if it meets the criteria in the OECD document, which is incorporated into the Principles (see section 4). The term *bioaccumulative* takes the meaning of that term in the Australian PBT criteria, which is also incorporated into the Principles (see section 4).
10. An industrial chemical satisfies subsection 10(3) if it meets both of the following:
    * the chemical is harmful, toxic, or very toxic to aquatic life, or is likely to have an adverse effect on non-aquatic organisms; and
    * either:
      + the measured or predicted environmental concentration of the chemical exceeds, or would exceed, the amount equal to 10% of the acceptable level of the chemical for the environment if the chemical is used in Australia in accordance with the particular assessed use for the chemical; or
      + the chemical is likely to be toxic to aquatic life with long lasting effects and, if the chemical is used in Australia in accordance with the particular assessed use for the chemical, the chemical would be released into the environment.
11. The terms *harmful*, *toxic*, *very toxic*, and *toxic to aquatic life with long lasting effects* take the same meaning as in the GHS (section 4). The GHS is incorporated into the Principles as existing from time to time in section 4.
12. Where the measured or predicted environmental concentration of a chemical is greater than or equal to 10% of the concentration predicted to cause harm to the environment, there is a risk that, if circumstances were to change slightly so as to increase the level of exposure to the environment, release of the chemical may cause harm to the environment. Small changes that may have this result could include where the released volume increases significantly, where the daily effluent volume in a sewage treatment plant is lower than assessed or where the volume of water in a receiving environment is decreased (such as in times of drought). As there is a relatively small margin between the predicted environmental concentration and the concentration predicted to cause harm, subsection 10(3) has the effect that, because of this risk, they will generally be listed in Schedule 4 to the Register.
13. An industrial chemical satisfies subsection 10(4) if it meets each of the following:

* the chemical contains an inorganic component; and
* the inorganic component is in a form that is, or could become, bioavailable if the chemical is used in Australia in accordance with the particular assessed use for the chemical; and
* the chemical is likely to be either harmful to aquatic life with acute effects or harmful to aquatic life with long lasting effects.

1. The terms *bioavailable*, *harmful to aquatic life with acute effects* and *harmful to aquatic life with long lasting effects* are defined in section 4 to take the meaning of those terms in the GHS.
2. An industrial chemical satisfies subsection 10(5) if the Minister believes, on reasonable grounds, that the chemical, if used in Australia in accordance with the particular assessed use for the chemical, will have a comparable effect on the environment as other chemicals listed (or likely to be listed) in Schedule 4, and is satisfied that it is appropriate to list the chemical in Schedule 4 to the Register.
3. This last criterion provides the Minister with appropriate flexibility to list an industrial chemical in Schedule 4 even if it does not otherwise meet the technical criteria in subsections 10(2) to (4) but poses a comparable risk to the environment as other chemicals that do meet those criteria. This will ensure that harmful chemicals will be able to be regulated appropriately based on their likely effect on the environment, even if they have novel technical characteristics that do not fit into the more common categories.

**Section 11 – When a relevant industrial chemical has Schedule 3 risk characteristics**

1. Section 11 sets out the risk characteristics of which the Minister must be satisfied to list an industrial chemical in Schedule 3 of the Register.
2. Schedule 3 chemicals are considered to be of intermediate concern to the environment, but at the lower end of that scale. Schedule 3 chemicals will be listed by reference to particular end uses (assessed uses). This is consistent with the majority of risk assessments undertaken on industrial chemicals, which assess the chemical by reference to one or more proposed uses. Furthermore, different end uses of an industrial chemical may pose different risks to the environment and, as such, may require different risk management measures or other controls.
3. To list an industrial chemical in Schedule 3 of the Register, the Minister must be satisfied that the chemical meets the criteria in each of paragraphs 11(1)(a), (b), (c) and (d).
4. Paragraphs 11(1)(a) and (b) require the Minister to be satisfied that the chemical does not have Schedule 7 risk characteristics or Schedule 6 risk characteristics and that the chemical, if used in accordance with a particular assessed use (i.e. the end use that is being listed), does not meet the criteria for Schedules 5 or 4. This reflects the policy that the Minister should assess each chemical against the criteria from the highest schedule to lowest schedule, so as to ensure that chemicals are assigned to the highest schedule that is appropriate based on the available information.
5. Paragraph 11(1)(c) requires the Minister to be satisfied that the chemical, if used in Australia in accordance with a particular assessed use for the chemical (i.e. the end use that is being listed), has the potential to cause harm to the environment.
6. The purpose of this ‘harm criteria’ is to ensure that all chemicals listed in this schedule pose a sufficiently high risk to the environment to make it appropriate to list the chemical in Schedule 3 to the Register. In addition, it ensures that chemicals that may meet the technical criteria in paragraph 11(1)(d), but for whatever reason do not have the potential to harm the environment, are not listed in a schedule with controls or risk management measures that do not reflect the environmental risk the chemical actually poses.
7. Paragraph 11(1)(d) requires the Minister to be satisfied that the chemical meets one of subsections 11(2), 11(3), 11(4) or 11(5). These are the ‘technical criteria’ that can be addressed using information considered during an environmental risk assessment. These criteria relate to the level of environmental concern arising from both the inherent characteristics of the industrial chemical and the proposed use of the industrial chemical. These criteria have been developed and refined after extensive consultation with stakeholder groups. They are aligned with the criteria for Schedule 3 previously set out in publicly available policy documents relating to the National Standard for Environmental Risk Management of Industrial Chemicals (now known as IChEMS).
8. An industrial chemical satisfies subsection 11(2) if it meets both of the following:

* the chemical is harmful, toxic, or very toxic to aquatic life, or is likely to have an adverse effect on non-aquatic organisms; and
* either:
  + the measured or predicted environmental concentration of the chemical exceeds, or would exceed, the amount equal to 1% of the acceptable level of the chemical for the environment if the chemical is used in Australia in accordance with the particular assessed use for the chemical; or
  + the chemical is likely to be harmful to aquatic life with long lasting effects.

1. The terms *harmful*, *toxic*, *very toxic* and *harmful to aquatic life with long lasting effects* take the same meaning as in the GHS (section 4). The GHS is incorporated into the Principles as existing from time to time in section 4.
2. Where the measured or predicted environmental concentration of a chemical is greater than or equal to 1% of the concentration predicted to cause harm to the environment, there is a risk that, if circumstances were to change moderately so as to increase the level of exposure to the environment, release of the substance may cause harm to the environment. As there is a substantial margin between the predicted environmental concentration and the concentration predicted to cause harm, subsection 11(2) has the effect that, because of this risk, they will generally be listed in Schedule 3 to the Register.
3. An industrial chemical satisfies subsection 11(3) if it meets each of the following:

* the chemical contains an inorganic component; and
* the inorganic component is in a form that is, or could become, bioavailable if the chemical is used in Australia in accordance with the particular assessed use for the chemical.

1. The term *bioavailable* is defined in section 4 to take the meaning of that term in the GHS.
2. An industrial chemical satisfies subsection 11(4) if it has other characteristics that mean that, if used in Australia in accordance with the particular assessed use for the chemical, the chemical has the potential to cause acute adverse effects to the environment or long lasting adverse effects to the environment. This criterion acknowledges that some chemicals may have the potential to cause harm to the environment for reasons other than predicted environmental concentration or the form of an inorganic component. As such, the intention for 11(4) is not to refer to the GHS classifications for aquatic life (which are referred to in subsection 11(2)), but instead to cover any ‘other characteristics’ that may have adverse short or long-term effects on the environment and therefore mean the chemical should be listed in Schedule 3. Chemicals with ‘other characteristics’ may include, for example, chemicals with endocrine activity or global warming potential, or chemicals that are nanomaterials.
3. The terms *harmful to aquatic life with acute effects* and *harmful to aquatic life with long lasting effects* are defined in section 4 to take the meaning of those terms in the GHS.
4. The term *adverse effect* is also defined in section 4 to mean a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or subpopulation that results in an impairment of the functional capacity of the organism, system or subpopulation, an impairment of the capacity of the organism, system or subpopulation to compensate for additional stress, or an increase in the susceptibility of the organism, system or subpopulation to other influence.
5. An industrial chemical satisfies subsection 11(5) if the Minister believes, on reasonable grounds, that the chemical, if used in Australia in accordance with the particular assessed use for the chemical, will have a comparable effect on the environment as other chemicals listed (or likely to be listed) in Schedule 3, and is satisfied that it is appropriate to list the chemical in Schedule 3 to the Register.
6. This last criterion provides the Minister with appropriate flexibility to list an industrial chemical in Schedule 3 even if it does not otherwise meet the technical criteria in subsections 11(2) to (4) but poses a comparable risk to the environment as other chemicals that do meet those criteria. This will ensure that harmful chemicals will be able to be regulated appropriately based on their likely effect on the environment, even if they have novel technical characteristics that do not fit into the more common categories.

**Section 12 – When a relevant industrial chemical has Schedule 2 risk characteristics**

1. Section 12 sets out the risk characteristics of which the Minister must be satisfied to list an industrial chemical in Schedule 2 to the Register.
2. Schedule 2 chemicals are considered to be of intermediate concern to the environment, but at the lowest end of that scale. Schedule 2 chemicals will be listed by reference to particular end uses (assessed uses). This is consistent with the majority of risk assessments undertaken on industrial chemicals, which assess the chemical by reference to one or more proposed uses. Furthermore, different end uses of an industrial chemical may pose different risks to the environment and, as such, may require different risk management measures or other controls.
3. To list an industrial chemical in Schedule 2 of the Register, the Minister must be satisfied that the chemical meets the criteria in each of paragraphs 12(a), (b), (c) and (d).
4. Paragraphs 12(a) and (b) require the Minister to be satisfied that the chemical does not meet the criteria for Schedules 7 or 6, and that the chemical, if used in accordance with a particular assessed use (i.e. the end use that is being listed), does not meet the criteria for Schedules 5, 4 or 3. This reflects the policy that Minister should assess each chemical against the criteria from the highest schedule to lowest schedule, so as to ensure that chemicals are assigned to the highest schedule that is appropriate based on the available information.
5. Paragraph 12(c) requires the Minister to be satisfied that the chemical, if used in Australia in accordance with the particular assessed use for the chemical, is unlikely to cause harm to the environment.
6. Paragraph 12(d) requires the Minister to be satisfied that it is appropriate to list the chemical in Schedule 2 of the Register. This criterion provides flexibility for the Minister to decide not to list a particular industrial chemical in Schedule 2 despite the chemical meeting the criteria in paragraphs 12(a) to (c), on the basis that the Minister is not satisfied that Schedule 2 reflects the appropriate level of regulation for the chemical. For instance, the Minister may instead consider that the level of risk posed by the particular chemical is sufficiently low that it is more appropriate for Schedule 1 than Schedule 2.

**Section 13 – When a relevant industrial chemical has Schedule 1 risk characteristics**

1. Section 13 sets out the risk characteristics of which the Minister must be satisfied to list an industrial chemical in Schedule 1 to the Register.
2. To list an industrial chemical in Schedule 1 to the Register, the Minister must be satisfied that, if the chemical is used in Australia for any end use for the chemical, the risk to the environment posed by the chemical would be such that it would not be appropriate to list the chemical in Schedule 7, 6, 5, 4, 3, or 2.
3. In other words, Schedule 1 chemicals are those chemicals that do not meet the criteria for any of the higher schedules and are therefore not appropriate for those schedules (and for the controls that are may be imposed on chemicals listed in those schedules). The risk to the environment posed by Schedule 1 chemicals will generally be negligible, unless the chemical is released to the environment in a completely uncontrolled way, or otherwise mishandled.
4. Schedule 1 chemicals will not be listed by reference to a specific end use, as the risk to the environment posed by the chemical is assessed on the basis of any end use. If a chemical has a particular end use that does not meet the criteria for Schedule 1 (because it meets the criteria for a higher schedule), the chemical will not be able to be listed in Schedule 1.

**Part 3 – Specification of certain matters in relation to a relevant industrial chemical**

1. Paragraph 11(3)(b) of the ICEMR Act has the effect that the following decisions, in relation to an industrial chemical that has been, or is being, listed in a Schedule of the Register, are each a kind of scheduling decision:
   * a decision to specify any one or more of the following matters in relation to the chemical:
     + that the export, import or manufacture of the chemical is prohibited, or restricted, in all circumstances or in specified circumstances;
     + that all or any end uses for the chemical are prohibited, or restricted, in all circumstances or in specified circumstances;
     + one or more end uses for the chemical;
     + one or more risk management measures for the chemical.
2. In addition, paragraph 11(3)(c) allows additional kinds of scheduling decisions to be specified in the rules.
3. The *Industrial Chemicals Environmental Management (Register) Rules 2022* have been made for the purposes of paragraph 11(3)(c) specifying that the following decisions are also a kind of scheduling decision:
   * a decision to specify that the exportation, importation, manufacture or use of a product or article containing the chemical is prohibited, or restricted, in all circumstances or in specified circumstances;
   * a decision to specify one or more risk management measures for a product or article containing the chemical.
4. As noted above, it is intended that all industrial chemicals for which a scheduling decision is made will be listed in one or more Schedules of the Register.
5. Part 3 of the Principles (sections 14 to 17) sets out guidance for decision-makers in relation to making the kinds of scheduling decisions set out in paragraphs 11(3)(b) and (c) for chemicals listed in each of the Schedules of the Register.
6. Such scheduling decisions are important as they will set the specific controls to be imposed on each industrial chemical listed in a Schedule of the Register and, consistent with the objective in paragraph 3(d) of the ICEMR Act, will reflect the views of the Commonwealth on the controls, including risk management measures, that should be applied to those chemicals. These controls will need to be implemented and enforced by jurisdictions, through adoption and implementation of the scheduling decisions in the Register.
7. It is intended that the Minister will have some flexibility to depart from the general rules set out in Part 3 where appropriate, or where there are exceptional circumstances necessitating a different approach (including, but not limited to, where Australia has international obligations in relation to the chemical). This flexibility is built into sections 14 to 17 of the Principles as appropriate.
8. The general principle is that the higher the schedule in which an industrial chemical is listed, the more stringent the controls that are likely to be imposed on the chemical.
9. This includes (potentially) prohibitions and restrictions on import, export, manufacture, or use of the chemical, as well as the imposition of risk management measures that control (as appropriate) the use, storage, handling, or disposal of the chemical. Risk management measures are intended to reduce the environmental risk associated with the industrial chemical to an acceptable level and to prevent harm to the environment during the intended normal use of the chemical. Risk management measures imposed on particular chemicals may be directed at protecting the environment generally, or they may be directed at protecting specific aspects of the environment such as surface water, aquatic ecosystems, land, terrestrial ecosystems or air. Risk management measures could also potentially be directed at specific locations, if considered appropriate. Risk management measures may also be used to set a minimum standard for the management of the chemical.
10. Where Australia is a party to an international convention concerning a particular industrial chemical (i.e. has ratified the convention in relation to that chemical), it is intended that the controls (including risk management measures) imposed on the chemical will align with Australia’s obligations under the relevant convention. This could, depending on the convention, include obligations relating to the import, export, manufacture, use, emissions, storage, and end of life processes (for example, disposal, destruction, recovery, recycling, reuse, reclamation etc) of a chemical. Controls on some convention chemicals may, however, go further than Australia’s international obligations if considered appropriate in the circumstances.
11. It is intended that chemicals listed in Schedule 7 will generally be prohibited from import, export, manufacture and use in Australia except in very limited circumstances. These chemicals do not have an essential use in Australia and are of such high concern that they are intended to be phased out from use in Australia due to the high risk they pose to the environment.
12. Similarly, it is intended that Schedule 6 chemicals will generally be prohibited from import, export, manufacture or use in Australia except for very limited circumstances (including specified essential uses) as these chemicals have either been otherwise phased out or are in the process of being phased out.
13. The Minister will also be able to prohibit or restrict the import, export, manufacture or use of products or articles containing Schedule 6 or 7 chemicals.
14. In contrast, it is intended that chemicals listed in Schedule 1 will generally have minimal controls imposed on their import, export, manufacture or end use, due to the negligible risk such chemicals pose to the environment.
15. The intention is that chemicals listed in Schedules 2 to 5, being of intermediate concern to the environment, will have escalating levels of controls imposed on them, though the Minister will have more discretion in deciding appropriate measures than for chemicals listed in the highest and lowest schedules.
16. As chemicals listed in these schedules will be listed by reference to particular end uses, the controls imposed on those chemicals may differ between end uses. This is appropriate as different end uses of chemicals may pose different risks to the environment.

**Section 14 – Specification of certain matters in relation to a relevant industrial chemical to be listed in Schedule 7 of the Register etc**

1. Section 14 sets out general parameters that apply to decision-makers when making or varying a scheduling decision for a chemical that has been, or is being, listed in Schedule 7 to the Register.
2. Subsection 14(2) provides that, for Schedule 7 chemicals, the Minister is required, unless satisfied it is inappropriate to do so, to make scheduling decisions for the chemical to the following effect:

* a decision prohibiting the import, export, or manufacture of the chemical except for research or laboratory purposes, or for the purpose of environmentally sound disposal of the chemical;
* a decision prohibiting all end uses of the chemical except for research or laboratory purposes, or for the purpose of environmentally sound disposal of the chemical;
* a decision to specify such risk management measures for the chemical as the Minister considers appropriate to manage the risk to the environment posed by the chemical.

1. The requirement that the Minister must make such scheduling decisions unless satisfied it is inappropriate to do so is intended to provide flexibility for the Minister to adapt to circumstances where the general rule is not considered appropriate because of, for instance, the particular properties of, or risks to the environment posed by, the chemical.
2. Subsection 14(3) clarifies that the Minister must not specify a matter listed in subsection 14(2) if to do so would be inconsistent with Australia’s international obligations in respect of the chemical.
3. Subsection 14(4) applies to scheduling decisions concerning products and articles containing Schedule 7 chemicals. It provides that, if satisfied that it is appropriate to do so, the Minister is required to make scheduling decisions to the following effect:
   * a decision to prohibit or restrict the import, export, manufacture or use of a product or article containing the chemical in all circumstances or in specified circumstances;
   * a decision to specify such risk management measures for a product or article containing the chemical as the Minister considers appropriate to manage the risks posed to the environment by the product or article.
4. This will allow for the Minister to make a scheduling decision to, among other things, prohibit or restrict the import, export, manufacture or use of products and articles containing a particular industrial chemical where Australia is required to do so by an international convention it has ratified or that it intends to ratify (such as the Minamata Convention on Mercury or the Stockholm Convention on Persistent Organic Pollutants).
5. Subsection 14(5) clarifies that the Minister must not specify a matter listed in subsection 14(4) if to do so would be inconsistent with Australia’s international obligations in respect of the chemical.
6. However, it is important to note that the power to make scheduling decisions concerning products or articles containing Schedule 7 chemicals is not confined to ensuring compliance with Australia’s international obligations. Instead, it may be that the Minister considers that, independently of any obligations on Australia, the risk posed to the environment from a particular product or article containing a Schedule 7 chemical is sufficiently high that it is appropriate to prohibit or restrict the import, export, manufacture or use in Australia of such products or articles (in all circumstances or in specified circumstances).

**Section 15 – Specification of certain matters in relation to a relevant industrial chemical to be listed in Schedule 6 of the Register etc**

1. Section 15 sets out general parameters that apply to decision-makers when making or varying a scheduling decision for a chemical that has been, or is being, listed in Schedule 6 to the Register.
2. Under subsection 15(2), for Schedule 6 chemicals the Minister is required, unless satisfied it is inappropriate to do so, to make scheduling decisions for the chemical to the following effect:
   * a decision prohibiting the import, export, or manufacture of the chemical except for:
     + research or laboratory purposes; or
     + the purpose of environmentally sound disposal of the chemical; or
     + the purposes of a specified essential use of the chemical in Australia;
   * a decision prohibiting all end uses of the chemical except for:
     + research or laboratory purposes; or
     + the purpose of environmentally sound disposal of the chemical; or
     + the purposes of a specified essential use of the chemical in Australia;
   * a decision to specify such risk management measures for the chemical as the Minister considers appropriate to manage the risk to the environment posed by the chemical.
3. The requirement that the Minister must make such scheduling decisions unless satisfied it is inappropriate to do so is intended to provide flexibility for the Minister to adapt to circumstances where the general rule is not considered appropriate because of, for instance, the particular properties of, or risks posed by, the chemical.
4. Subsection 15(3) clarifies that the Minister must not specify a matter listed in subsection 15(2) if to do so would be inconsistent with Australia’s international obligations in respect of the chemical.
5. Subsection 15(4) applies to scheduling decisions concerning products and articles containing Schedule 6 chemicals. It provides that, if satisfied that it is appropriate to do so, the Minister is required to make scheduling decisions to the following effect:
   * a decision to prohibit or restrict the import, export, manufacture or use of a product or article containing the chemical in all circumstances or in specified circumstances;
   * a decision to specify such risk management measures for a product or article containing the chemical as the Minister considers appropriate to manage the risks posed to the environment by the product or article.
6. This will allow the Minister to make scheduling decisions to, among other things, prohibit or restrict the import, export, manufacture or use of products and articles containing an industrial chemical where Australia is required to do so by an international convention it has ratified or that it intends to ratify.
7. Subsection 15(5) clarifies that the Minister must not specify a matter listed in subsection 15(4) if to do so would be inconsistent with Australia’s international obligations in respect of the chemical.
8. However, it is important to note that the power to make scheduling decisions concerning products or articles containing Schedule 6 chemicals is not confined to ensuring compliance with Australia’s international obligations. Instead, it may be that the Minister considers that, independently of any obligations on Australia, the risk posed to the environment from a particular product or article containing a Schedule 6 chemical is sufficiently high that it is appropriate to prohibit or restrict the import, export, manufacture or use in Australia of such products or articles (in all circumstances or in specified circumstances).

**Section 16 – Specification of certain matters in relation to a relevant industrial chemical to be listed in Schedule 5, 4, 3 or 2 of the Register etc**

1. Section 16 sets out general parameters that apply to decision-makers when making or varying a scheduling decision for a chemical that has been, or is being, listed in Schedules 5, 4, 3 or 2 to the Register.
2. Under subsection 16(2), for chemicals listed in these schedules the Minister must make or vary scheduling decisions so that:
   * one or more end uses are specified for the chemical; and
   * such risk management measures are specified for the chemical, or for a specified end use of the chemical, as the Minister considers appropriate to manage the risks posed to the environment by the chemical.

1. This is consistent with the policy that chemicals listed in Schedules 2 to 5 will be listed by reference to a specific end use, which reflects the fact that the majority of risk assessments undertaken on industrial chemicals assess the chemical by reference to one or more proposed uses. Furthermore, different end uses of an industrial chemical may pose different risks to the environment and, as such, may require different risk management measures or other controls.
2. Subsection 16(3) clarifies that the Minister must not specify a matter listed in subsection 16(2) if to do so would be inconsistent with Australia’s international obligations in respect of the chemical.
3. Subsection 16(4) provides that, for chemicals listed in Schedules 4, 3 or 2, the Minister must not make or vary a scheduling decision for such a chemical that has any of the following effects:

* a decision that prohibits or restricts the import, export, or manufacture of the chemical in all circumstances or in specified circumstances;
* a decision that prohibits or restricts one or more end uses of the chemical in all circumstances or in specified circumstances;
* a decision that prohibits or restricts the import, export or manufacture of a product or article containing the chemical in all circumstances or in specified circumstances.

1. This requirement does not apply to chemicals listed in Schedule 5. This is because, given the higher risks to the environment posed by Schedule 5 chemicals, it may be appropriate in some circumstances to impose restrictions on import, export, manufacture or use of specific Schedule 5 chemicals or products or articles containing specific Schedule 5 chemicals. This would be assessed by the Minister on a case-by-case basis.
2. Subsection 16(5) provides that, despite the general requirement in subsection 16(4), such matters may be specified for a chemical listed in Schedules 4, 3 or 2 if the Minister is satisfied that either:

* it would be consistent with Australia’s international obligations to specify such a matter in relation to the chemical; or
* there are exceptional circumstances that apply in relation to the chemical that make it appropriate to specify such a matter in relation to the chemical.

1. This provides flexibility for the Minister to adapt to evolving circumstances such as changes in international obligations or technologies, and to account for complex combinations of chemical characteristics and use patterns, while still preserving a risk-based approach for such types of scheduling decisions.

**Section 17 – Specification of certain matters in relation to a relevant industrial chemical to be listed in Schedule 1 of the Register etc.**

1. Section 17 sets out general parameters that apply to decision-makers when making or varying a scheduling decision for a chemical that has been, or is being, listed in Schedule 1 to the Register.
2. For such chemicals, the Minister must not make or vary a scheduling decision for such a chemical that has any of the following effects:
   * a decision that prohibits or restricts the import, export, or manufacture of the chemical in all circumstances or in specified circumstances; or
   * a decision that prohibits or restricts one or more end uses of the chemical in all circumstances or in specified circumstances; or
   * a decision that specifies one or more end uses of the chemical; or
   * a decision that prohibits or restricts the import, export, manufacture or use of a product or article containing the chemical in all circumstances or in specified circumstances.
3. The purpose of this rule is to ensure that the default position is that industrial chemicals listed in Schedule 1 are not made subject to controls or other restrictions in relation to the import, export, manufacture, and use. This is consistent with the fact that Schedule 1 chemicals will have already been assessed as posing a negligible risk to the environment, and as not being appropriate for the controls that are imposed on chemicals that are listed in higher schedules.
4. However, there may be rare or novel circumstances where Schedule 1 chemicals do require minor controls of these types. This may potentially be because of technological advancements, information received by the Minister (either in the risk assessment or by other means) or future international obligations. For this reason, subsection 17(3) allows the Minister to make a scheduling decision that has the effect of specifying one or more end uses for a Schedule 1 chemical. To make such a scheduling decision, the Minister needs to be satisfied that there are exceptional circumstances that apply in relation to the chemical which make it appropriate to specify such a matter in relation to the chemical.
5. Section 17 does not impose any restrictions on the imposition of risk management measures for Schedule 1 chemicals. However, it is intended that any risk management measures imposed on Schedule 1 chemicals will generally involve minimal controls, given the level of risk involved.