



Resource Recovery Exemption under Part 9, Clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014

The processed oyster shell exemption 2025

Introduction

This exemption:

- is issued by the Environment Protection Authority (EPA) under clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation); and
- exempts a **consumer** of **processed oyster shell** from certain requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the Waste Regulation in relation to the application of that waste to land, provided the **consumer** complies with the conditions of this exemption.

This exemption should be read in conjunction with 'The processed oyster shell order 2025'.

1. Waste to which this exemption applies

- 1.1. This exemption applies to **processed oyster shell** that is, or is intended to be, **applied to land** as a **soil amendment** or **liming agent**.
- 1.2. In this exemption, **processed oyster shell** means **oyster shell** that:
 - (a) has been generated from **single seed oysters** at **NSW oyster aquaculture leases**;
 - (b) has been generated from **normal operating conditions** or from a **mass mortality event**; and
 - (c) has undergone **desiccation** and **size reduction**.

Processed **oyster shell** does not include **oyster shell** that has been generated from **stick cultivation**.

2. Persons to whom this exemption applies

- 2.1. This exemption applies to any person who applies, or intends to apply, **processed oyster shell** to land as set out in clause 1.1.

3. Duration

- 3.1. This exemption commences on 17 October 2025 and is valid until revoked by the EPA by notice published in the Government Gazette.

4. Premises to which this exemption applies

- 4.1. This exemption applies to the **premises** at which the **consumer's** actual or intended application of **processed oyster shell** is carried out.

5. Exemption

- 5.1. Subject to the conditions of this exemption, the EPA exempts each **consumer** from the following provisions of the POEO Act and the Waste Regulation in relation to the **consumer's** actual or intended application of **processed oyster shell** to land as a **soil amendment** or **liming agent** at the **premises**:
- section 48 of the POEO Act in respect of the scheduled activities described in clauses 39 and 42 of Schedule 1 of the POEO Act;
 - Part 4 of the Waste Regulation;
 - section 88 of the POEO Act; and
 - clause 109 and 110 of the Waste Regulation.
- 5.2. The exemption does not apply in circumstances where **processed oyster shell** is received at the **premises** for which the **consumer** holds a licence under the POEO Act that authorises the carrying out of the scheduled activities on the **premises** under clause 39 'waste disposal (application to land)' or clause 40 'waste disposal (thermal treatment)' of Schedule 1 of the POEO Act.

6. Conditions of exemption

The exemption is subject to the following conditions:

- 6.1. At the time **processed oyster shell** is received at the **premises**, it must meet all chemical and other material requirements for **processed oyster shell** which are required under 'The processed oyster shell order 2025'.
- 6.2. The **processed oyster shell** can only be **applied to land** as a **soil amendment** or **liming agent**.
- 6.3. The **consumer** must mix the **processed oyster shell** into the topsoil.
- 6.4. Where the **consumer** receives **bulk quantities** of **processed oyster shell**, the **consumer** must adhere to the following specific exemption conditions:
- 6.4.1. The application rate must be equal to, or less than, the agronomic rate for the most limiting factor.
- 6.4.2. The **consumer** must keep a written record of the following for a period of six years:
- 6.4.2.1. the quantity of **processed oyster shell** received;
 - 6.4.2.2. the name and address of the supplier of **processed oyster shell** received.
- 6.4.3. The **consumer** must make any records required to be kept under this exemption available to **authorised officers** of the EPA on request.
- 6.4.4. The **consumer** must ensure that any application of **processed oyster shell** to land must occur within a reasonable period of time after receipt (see notes for clarity).

7. Definitions

In this exemption:

application to land or **applied to land** or **apply to land** means applying to land by:

- spraying, spreading or depositing on the land; or
- ploughing, injecting or mixing into the land; or
- filling, raising, reclaiming or contouring the land.

authorised officer has the same meaning as in the POEO Act.

bulk quantities means more than 100 kg.

clean, dry and outdoor environment means an outdoor location for the **oyster shell stockpile**, where the **oyster shell stockpile** is stored on:

- a dedicated raised mat or mesh structure that optimises aeration of the **oyster shell**; or
- a dedicated surface with low permeability (e.g. asphalt or concrete) that easily drains and is located away from existing drainage lines. This excludes storing **oyster shell** directly on soil.

consumer means a person who applies, or intends to apply, **processed oyster shell** to land.

daily global solar exposure means the total solar energy for a day falling onto a horizontal surface and is measured from midnight to midnight. **Daily global solar exposure** data is available on the Australian Government Bureau of Meteorology [Climate Data Online webpage](#) or by searching for 'BOM climate data online'. This resource provides public access to daily solar exposure data for the closest weather station available.

desiccation means a process of drying **oyster shell** outdoors. **Desiccation** must be carried out for:

- a minimum period of 90 days; and
- at least 30 days where the **daily global solar exposure** is greater than 18 MJ/m².

If the minimum period of 90 days does not include at least 30 days where the **daily global solar exposure** is greater than 18 MJ/m², **desiccation** must continue until the **oyster shell stockpile** has been exposed to at least 30 days where the **daily global solar exposure** is greater than 18 MJ/m².

disease outbreaks means the occurrence of disease cases or pests affecting oysters more than normal expectancy, including those caused by viruses, bacteria and/or protozoa such as:

- *Marteilia sydneyi* (causing QX disease)
- *Ostreid herpesvirus -1 microvariant* (causing Pacific Oyster Mortality Syndrome)
- *Bonamia roughleyi* (causing winter mortality)
- *Polydora websteri* (Mudworm)
- *Imogine mcgrathi* (Flatworms)

liming agent means any **soil amendment** containing calcium carbonate, magnesium carbonate or other materials used to neutralise soil acidity and furnish calcium and magnesium for plant growth.

mass mortality event means predation, **disease outbreaks**, water temperature fluctuations and flooding events that cause widespread oyster death.

normal operating conditions means the harvesting and processing of oysters. This involves the collection of oysters from the bags, baskets or trays where they are grown and **shucking** of oysters to remove the **oyster flesh** from the **oyster shell**.

NSW oyster aquaculture leases means oyster leases for which there is a NSW aquaculture permit where oysters are bred and raised for their **oyster flesh** or related products such as pearls. Aquaculture permit means an aquaculture permit issued and in force under Part 6 of the *Fisheries Management Act 1994*.

oyster flesh means the portion of the oyster that is removed from the **oyster shell** for human consumption.

oyster shell means the shell waste generated from Sydney Rock Oysters (*Saccostrea glomerata*), Pacific Oysters (*Crassostrea gigas*), Native Flat Oysters (*Ostrea angasi*) and Akoya Pearl Oysters (*Pinctada imbricata*). The **oyster shell** may contain remnants of the abductor muscle still attached to the shell.

oyster shell stockpile means a stockpile of **oyster shell** stored in a **clean, dry and outdoor environment**. The **oyster shell stockpile** must not contain **oyster flesh** and must not be greater than 1m in height. If a generator has more than one **oyster shell stockpile**, the **oyster shell stockpiles** must be stored so that one stockpile does not mix with other **oyster shell stockpiles**.

physical contaminant means any natural or anthropogenic material other than **oyster shell**, and includes materials such as plastic, glass, metal, rubber, cloth, paper or wood.

premises has the same meaning as in the POEO Act.

shucking means the process of opening an oyster using an oyster knife or an automated oyster shucker to wholly remove the **oyster flesh** from the **oyster shell**.

single seed oyster means an individual unattached oyster that is grown from small spat produced by removing wild oysters at a very early age from plastic collectors or produced as single oysters in a shellfish hatchery.

size reduction means a process in which the particle size of a solid is made smaller using methods such as hammer milling, crushing or grinding. Size reduction must not be used as a method of managing **physical contaminant** loading.

soil amendment means any material that is applied to soil to enhance plant growth or improve soil physical, chemical or biological properties or processes. Soil amendments may contain important fertiliser elements, but the term commonly refers to added materials other than those used primarily as fertilisers (e.g. **liming agents**, compost, animal manures, crop residues).

stick cultivation means traditional growing of wild caught oysters on the sticks that they are caught on. Suitable method for areas subject to significant wave action. 'Stick oysters' may be removed from sticks and fattened on trays or in baskets prior to harvest.

KAREN MARLER

Director Technical (Chemicals, Land and Radiation)

Regulatory Practice and Environmental Solutions Division

Notes

The EPA may amend or revoke this exemption at any time. It is the responsibility of the **consumer** to ensure they comply with all relevant requirements of the most current exemption. The current version of this exemption will be available on www.epa.nsw.gov.au

In gazetting or otherwise issuing this exemption, the EPA is not in any way endorsing the use of this substance or guaranteeing that the substance will confer benefit.

The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this exemption nor the accompanying order guarantee that the environment, human health or agriculture will not be harmed.

The **consumer** should assess whether or not **processed oyster shell** is fit for the purpose the material is proposed to be used for, and whether this use will cause harm. The **consumer** may need to seek expert engineering or technical advice.

Regardless of any exemption provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with any other legislative requirements including, if applicable, any development consent(s) for managing operations on the site(s).

The receipt of **processed oyster shell** remains subject to other relevant environmental regulations in the POEO Act and the Waste Regulation. For example, a person who pollutes land (s. 142A) or water (s. 120), or causes air pollution through the emission of odours (s. 129), or does not meet the requirements for asbestos waste (s. 144AAB), regardless of having an exemption, is guilty of an offence and subject to prosecution.

This exemption does not alter the requirements of any other relevant legislation that must be met in utilising this material, including for example, the need to prepare a Safety Data Sheet (SDS).

Processed oyster shell that meets the conditions of this exemption should be applied to land by the **consumer** within 2 weeks of being received. Where there are extenuating circumstances **processed oyster shell** should be **applied to land** within 4 weeks of being received. The EPA considers that 6 weeks would be the absolute limit in all circumstances.

You may no longer be covered by this exemption if you fail to comply with the conditions of this exemption. Failure to make or keep records in accordance with this exemption constitutes an offence under section 286B of the POEO Act. It is also an offence under section 286C of the POEO Act to fail to give another person information or records where required under this exemption.