

# **End of waste code**

Fertiliser wash water and slurry (ENEW07278417)

Waste Reduction and Recycling Act 2011



## **Version history**

Version	Date	Description of changes	
1.00	4 June 2018	Original document	
2.00	15 December 2021	Amendment of EOW Code – approved by gazette on 21 January 2022.	
2.01	16 October 2023	Minor update to reflect the definition of waste moving into the <i>Waste Reduction and Recycling Act 2011</i> . This does not impact the interests of the producer or user of the resource.	
2.02	28 March 2024	Updated department name to reflect machinery of government changes and the definition of serious or material harm.	

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## 1. Explanatory Statement

This End of Waste (EOW) code for **fertiliser wash water and slurry** has been issued by the **chief executive** in accordance with section 159 of the *Waste Reduction and Recycling Act 2011* (WRR Act).

This EOW code states when the **fertiliser wash water and slurry** become a **resource** and any relevant requirements and/or conditions for its use. If the **resource** is not being used in accordance with the relevant requirements and/or conditions of this EOW code, or another type of permit that allows for its use, it is considered a waste under section 8AA of the WRR Act and must be **lawfully** transported and disposed of appropriately at a facility that is **lawfully** able to receive the waste.

#### 2. Guidance

## 2.1 Resource use versus activity

Under section 155 of the WRR Act, a waste stops being a waste and becomes a **resource** when it meets the requirements and conditions of an EOW code. Under section 159 of the WRR Act, an EOW code specifies the circumstances when a waste becomes a resource; how it must be used to be considered a resource; when it is no longer considered a resource but a waste instead; and conditions that must be complied with by resources users and registered resource producers.

An Environmental Authority (EA) under the *Environmental Protection Act 1994* (EP Act) is required where an activity being undertaken triggers the threshold for any environmentally relevant activity (ERA). This means that treating or processing the waste to meet the resource quality criteria under the EOW code may require an EA under the EP Act if the activity meets the threshold for an ERA.

#### 2.2 Resource versus waste

A waste that is a **resource** under an EOW code is considered a **resource** only for the use(s) approved in an EOW code. To be considered a resource under the EOW code, the material used as the resource must meet the requirements of the EOW code and be used in accordance with the conditions of the EOW code, otherwise it is considered a waste and must be managed in accordance with waste management requirements under the EP Act and the WRR Act and their subordinate legislation.

A **resource** under an EOW code, is deemed to be a waste again, if it is not used in accordance with the EOW code; if it is disposed of at a waste disposal site; or if it is deposited at a place in a way that would, apart from its use approved under an EOW code, constitute a contravention of the general littering provision (section 103) or the illegal dumping of waste provision (section 104) under the WRR Act.

#### 2.3 Failure to comply

It is an offence under section 158(1) of the WRR Act for a **registered resource producer** to produce the **resource**, or use, sell or give away the **resource** unless they comply with the requirements under an EOW code. Further, it is an offence under section 158(2) of the WRR Act for a **person** to use the **resource** in a way, or for a purpose, that does not comply with an EOW code for the **resource**. These offences carry a maximum penalty of 1,665 penalty units for an individual and 8,325 penalty units for a corporation<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> The value of a penalty unit is stated in the *Penalties and Sentences Regulation 2015* (Qld).

Please refer to Appendix B of this EOW code for general obligations for all **persons** operating under this EOW code, which includes the **resource users**.

## 2.4 Lawfulness of the activity

The issuing of this EOW code for the use of a **resource** does not warrant or imply the **lawfulness** of the activity under all legislation, or that approvals necessary under other legislation have or will be approved. It is the responsibility of the **registered resource producer** and **resource user** to identify and obtain all other approvals necessary for the relevant activities.

#### 3. Period of this EOW code

This EOW code takes effect from the day of gazettal of this EOW code and remains in force until it is amended, cancelled or suspended by the **chief executive**<sup>2</sup>.

## 4. Waste to which this EOW code applies

This EOW code is limited to **fertiliser wash water and slurry** generated from the processes described in *Requirement (6.3a)*. The **fertiliser wash water and slurry** becomes a **resource** when the requirements and conditions under this EOW code are met.

## 5. Person to whom this EOW code applies

## 5.1 Registered resource producers of the resource

5.11 A **registered resource producer** for this EOW code must comply with the stated registered resource producer requirements in Section 6 – Registered Resource Producer Requirements.

## 5.2 Resource users

5.21 The resource user must only use the resource in a way, and for a purpose allowed under this EOW code.

5.22 The **resource user** must comply with the stated conditions of use in Section 7 – Conditions of Use.

<sup>&</sup>lt;sup>2</sup> If an EOW code is to be amended, cancelled or suspended, the chief executive will provide an opportunity to make written submissions by providing a proposed action notice to the registered resource producers; and publishing the proposed action notice on the chief executive's <a href="website">website</a> (www.des.qld.qov.au).

## 6. Registered resource producer requirements

## Registration under this EOW code

(6.1) Prior to operating under this EOW code, the producer of the **resource** must register with the **chief executive** by giving a notice in the approved form<sup>3</sup> to become a **registered resource producer** for this EOW code.

## Approved resource

- (6.2) The approved **resource** is **fertiliser wash water** that complies with *Requirement* (6.3) of this EOW code.
- (6.3) The **registered resource producer** must not use, sell or give away the **resource** under this EOW code unless the **resource** meets all of the following criteria and quality characteristics:
  - a) is generated as a result of:
    - a. cleaning or washing of the fertiliser plant, relevant equipment used within the plant and fertiliser shed floors, either using high pressure water (no detergents or surfactants) or using mechanical means; and/or
    - b. hygroscopic sorbing of moisture into fertiliser products.
    - **c. washing of vehicle wheel treads** of vehicles exiting the fertiliser storage and handling areas within the plant.

and,

- b) the resource quality characteristics does not exceed the quality criteria (6.3.b.i,& ii) if the resource is to be used for nutrient supplement;
  - i. does not contain more than the 'maximum permissible concentration of impurities' for fertiliser in accordance with Biosecurity Regulation 2016; and
  - ii. does not contain more than the following levels of Total Petroleum Hydrocarbons (TPH) on a **volumetric basis**:

b. 
$$(C10 - C15) - 100 \text{ mg/L}$$

c. 
$$(C16 - C34) - 300 \text{ mg/L}$$

d. 
$$(>C34 - C36) - 500 \text{ mg/L}$$

c) the resource quality characteristics does not exceed the quality criteria stated in *Table 1:* Resource quality criteria if the resource is to be used as **irrigation** water.

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<sup>&</sup>lt;sup>3</sup> The approved form, *Registered Resource Producer for an EOW code*, is available on the chief executive's <u>website</u> (www.des.qld.gov.au).

Table 1: Resource quality criteria - Irrigation Water

Quality characteristic	Maximum Contaminant concentration for unrestricted soil applications (mg/L)
Arsenic	1
Cadmium	0.02
Chromium (Total)	0.1
Copper	2.0
Lead	2.0
Mercury	0.002
Nickel	1.0
Zinc	150
Benzene	0.6
Toluene	0.18
Ethylbenzene	0.08
m/p-xylene	0.14
o-xylene	0.20
Naphthalene	0.01
TRH C6 - C10 fraction	0.3
TRH >C10 - C16 fraction	1
TRH >C16 – C34 fraction	7
TRH >C34 – C40 fraction	5

## Resource monitoring

- (6.4) The **registered resource producer** must sample, measure and record the composition of the **resource** for the limits in *Requirement* (6.3)(b)(i & ii) or the quality characteristics in Table 1: Resource quality criteria, quarterly as a minimum.
- (6.5) All analyses required under this EOW code must be carried out by a laboratory that has **NATA** certification, or an equivalent certification for such analyses.

## Information to be provided

- (6.6) The **registered resource producer** must provide the following to the **resource user** each time the **resource** is provided for use:
  - a) a copy of the EOW code for Fertiliser wash water and slurry (ENEW07278417)4;
  - b) the registered resource producer's business name, ABN and address;
  - c) confirmation in writing that the **resource** being supplied is compliant with the *Requirement* (6.3) of this EOW code;

<sup>&</sup>lt;sup>4</sup> This can be a physical copy, an electronic copy or a link to the chief executive's <u>website</u> (<u>www.des.qld.gov.au</u>) where this EOW code is available.

- d) the most recent certificate of analysis for the composition of resource for the Requirement (6.3)(b)(i & ii)or the quality characteristics listed in Table 1: Resource quality criteria; and
- e) Safety Data Sheet for the resource.

#### Records

- (6.7) The **registered resource producer** must keep the following **records** for the **resource** supplied to a **resource user**:
  - a) origin of the **resource** (e.g. address, lot on plan and/or GPS coordinates);
  - b) quantity (in litres) of the **resource** supplied;
  - c) a most recent certificate of analysis for the quality characteristics listed in *Requirement* (6.3)(b)(i & ii) or the quality characteristics listed in *Table 1: Resource quality criteria*;
  - d) date of dispatch of the resource; and
  - e) business name, **ABN** and address of the **person** receiving the **resource**.
- (6.8) All **records** required to be kept by the **registered resource producer** under this EOW code must be:
  - a) kept by the registered resource producer for a period of not less than five (5) years; and
  - b) provided to the **chief executive** upon request, in the format requested and in the time period specified.

#### Notification of emergencies, incidents and exceptions

- (6.9) Any breach of a condition of this EOW code must be reported to the **chief executive** within 24 hours of becoming aware of the breach<sup>5</sup>.
- (6.10) **Records** of any breach of a requirement of this EOW code, including full details of the breach and any subsequent actions taken, must be kept and provided to the **chief executive** upon request, in the format requested and in the time period specified.

## 7. Conditions of use

#### Approved uses

(7.1) The **resource** must only be used in **agricultural applications** as liquid **fertiliser** and must only be applied as direct irrigation water or as a nutrient supplement.

## Resource application as direct irrigation water

- (7.2) Where the **resource** is applied as direct irrigation water:
  - a) the resource must only be applied under the direction of an **appropriately qualified person**;
  - b) the **resource** application must be conducted at an agronomic loading rate which considers the **resource** composition, crop nutritional demand and soil characteristics;

<sup>&</sup>lt;sup>5</sup> Reporting can be via the **chief executive's** Pollution Hotline (1300 130 372 – option 2) or via online reporting through the **chief executive's** website (www.des.qld.gov.au).

c) pooling and/or runoff of the resource must be minimised; andd) percolation of the resource beyond the plant root zone must be minimised.

## 8. Definitions

Words and phrases used throughout this EOW code in **bold** are defined below. Where a definition for a term used in this EOW code is sought and the term is not defined within this EOW code the definitions provided in the relevant legislation shall be used.

'agricultural applications' means cultivating plants, and growing field crops, pastures or turf (including that in golf courses) and includes horticultural applications.

'appropriately qualified person' means a person or persons who have professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

'Biosecurity Regulation 2016' means the most recent version of the biosecurity regulation which is in force at the time of generation and/or use of the **resource**.

'chief executive' means the Department of Environment, Science and Innovation or its successor.

'cleaning' means to perform or undergo a process of emptying the contents of the **fertiliser** plant, relevant equipment used within the plant and fertiliser shed floors without the use of any cleaning chemicals.

'detergents or surfactants' means complex mixtures containing a variety of ingredients, particularly surfaceactive agents (surfactants), builders, bleaches and additives, blended for specific performance characteristics.

'dry weight basis' means the composition of wet fertiliser wash water and slurry based on the mass of dry solids it contains.

'emergency(ies)' means a situation where either human health or safety is threatened, or serious or material environmental harm has been or is likely to be caused; and urgent action is necessary to protect the health or safety of persons, or prevent or minimise the harm, or rehabilitate or restore the environment because of the harm.

'environmental harm' means environmental harm as defined in Chapter 1 of the *Environmental Protection Act* 

'first flush' means a system on the site's stormwater drainage network which is installed to mitigate the risk of fertiliser exiting the site via stormwater.

**'fertiliser'** as defined in the **Biosecurity Regulation 2016**, means a 'substance that is manufactured, represented, supplied or used for the purpose of directly or indirectly—

- a) fertilising soil; or
- b) supplying nutrients to plants; or
- c) conditioning the soil by altering the chemical, physical or biological condition of the soil;

however, does not include a substance declared, under a Commonwealth Act or regulation, to be an agricultural chemical product or a veterinary chemical product.

'hygroscopic sorbing' means the process by which fertiliser granules absorb the moisture from air and turn into a slurry like substance.

'irrigation' means the process of supplying land with water via artificial channels to promote vegetation.

'load' means the volume of **resource** put in or on something for conveyance or transportation, carried at one time. For example, a truck and trailer carrying the **resource** is considered as one load as well as multiple bins travelling by rail. Where the **resource** is transported via conveyor systems, information should be recorded on a daily basis until the transfer ceases.

'NATA' is the National Association of Testing Authorities.

'person(s)' means an individual or a corporation.

'registered resource producer' means a person who produces the resource and has registered with the chief executive (in accordance with *Requirement (6.1)*) to use, sell or give away the resource to be used under this EOW code.

**'records'** include breach notifications, written procedures, analysis results, monitoring reports, monitoring programs and any other record keeping required under the relevant requirements and conditions of this EOW code.

'resource(s)' means fertiliser wash water and slurry which meet the quality criteria specified in *Requirement* (6.3) of this EOW code.

'resource user(s) 'resource user(s)' means a person who uses the resource for a use approved under this EOW code and in such a manner which does not cause any environmental harm. This includes any registered resource producer(s) who use the resource.

'safety data sheet' means a document containing data regarding the properties of the resource which provides users information on handling or working with that substance in a safe manner; and includes information such as physical data toxicity, environmental characteristics, health effects, first aid, reactivity; and storage, disposal, protective equipment and spill handling procedures.

'washing' means the act of cleaning with water including initial runoff from a rain event that is captured in the first flush.

## Appendix A — General obligation for all persons

This appendix is not intended to provide a comprehensive assessment of all obligations under Queensland law. It provides some general information and persons are encouraged to familiarise themselves with all requirements related to their specific operation.

## Responsibilities under the Environmental Protection Act 1994

All persons within the State of Queensland must also meet their obligations under the *Environmental Protection Act 1994*, and the regulations made under that Act.

#### General environmental duty

Section 319 of the *Environmental Protection Act 1994* (EP Act) states that we all have a general environmental duty. This means that we are all responsible for the actions we take that affect the environment. We must not carry out any activity that causes or is likely to cause environmental harm unless we take all reasonable and practicable measures to prevent or minimise the harm. To decide what meets your general environmental duty, you need to consider:

- the nature of the harm or potential harm
- the sensitivity of the receiving environment
- · the current state of technical knowledge for the activity
- the likelihood of successful application of the different measures to prevent or minimise environmental harm that might be taken
- the financial implications of the different measures as they would relate to the type of activity.

More information is available on the Department of Environment, Science and Innovation website www.des.qld.gov.au.

#### Some relevant offences under the Environmental Protection Act 1994

## Causing serious or material environmental harm (sections 437–39)

Material and serious environmental harm are defined in sections 16 and 17 of the EP Act. Material environmental harm is when the harm is not trivial or negligible in nature. Serious environmental harm is harm that is irreversible, of a high impact or widespread, or that is caused to an area of high conservation value or special significance. Damages, or costs required to rehabilitate the environment, of over thresholds amounts in the EP Act also constitutes material or serious environmental harm. Serious or material environmental harm excludes environmental nuisance.

## Causing environmental nuisance (section 440)

Environmental nuisance is unreasonable interference with an environmental value caused by aerosols, fumes, light, noise, odour, particles or smoke. It may also include an unhealthy, offensive or unsightly condition because of contamination.

#### Depositing a prescribed water contaminant in waters (section 440ZG)

Prescribed water contaminants include a wide variety of contaminants listed in Schedule 10 of the Environmental Protection Regulation 2019.

It is your responsibility to ensure that prescribed water contaminants are not left in a place where they may or do enter a waterway, the ocean or a stormwater drain. This includes making sure that stormwater falling on or running across your site does not leave the site contaminated. Where stormwater contamination occurs you

must ensure that it is treated to remove contaminants. You should also consider where and how you store material used in your processes onsite to reduce the chance of water contamination.

#### Placing a contaminant where environmental harm or nuisance may be caused (section 443)

A person must not cause or allow a contaminant to be placed in a position where it could reasonably be expected to cause serious or material environmental harm or environmental nuisance.

## Some relevant offences under the Waste Reduction and Recycling Act 2011

## Littering (section 103)

Litter is any domestic or commercial waste and any material a person might reasonably believe is refuse, debris or rubbish. Litter can be almost any material that is disposed of incorrectly. Litter includes cigarette butts and drink bottles dropped on the ground, fast food wrappers thrown out of the car window, poorly secured material from a trailer or grass clippings swept into the gutter. However, litter does not include any gas, dust, smoke or material emitted or produced during, or because of, the normal operations of a building, manufacturing, mining or primary industry.

## Illegal dumping of waste (section 104)

Illegal dumping is the dumping of large volumes of litter (200 litres or more) at a place. Illegal dumping can also include abandoned vehicles.

## Failure to comply with EOW code (section 158)

A registered resource producer for an EOW code must not use, sell or give away the resource unless the registered resource producer complies with the requirements of the EOW code relating to the resource.

A person, other than a registered resource producer, must not use a resource in a way, or for a purpose, that does not comply with an EOW code for the resource.

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