

# **Disposal permit to remove, treat and dispose of contaminated soil**

Guideline

Prepared by: Waste Operations, Environmental Services and Regulation, Department of Environment and Science

© State of Queensland, 2020.

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 4.0 Australia (CC BY) licence.



Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.

You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication.

For more information on this licence, visit <http://creativecommons.org/licenses/by/4.0/au/deed.en>

#### **Disclaimer**

This document has been prepared with all due diligence and care, based on the best available information at the time of publication. The department holds no responsibility for any errors or omissions within this document. Any decisions made by other parties based on this document are solely the responsibility of those parties. Information contained in this document is from a number of sources and, as such, does not necessarily represent government or departmental policy.

If you need to access this document in a language other than English, please call the Translating and Interpreting Service (TIS National) on 131 450 and ask them to telephone Library Services on +61 7 3170 5470.

This publication can be made available in an alternative format (e.g. large print or audiotape) on request for people with vision impairment; phone +61 7 3170 5470 or email <library@des.qld.gov.au>.

# Contents

Introduction .....	1
When is a soil disposal permit required? .....	1
What does a soil disposal permit authorise? .....	1
Why is a soil disposal permit required? .....	1
What if the land is not recorded in the EMR or CLR?.....	1
Is disposal the preferred option? .....	1
What if disposal of contaminated soil is the only option? .....	2
Who can undertake the detailed site investigation? .....	2
Do I need the landowner’s consent? .....	2
Do I need the landfill operator’s consent? .....	2
Can I get advice before submitting my application? .....	2
Is there an approved form for my application? .....	3
Is there a fee for my application?.....	3
What information must my application provide?.....	3
Where should I send my application?.....	3
How will the department decide the application? .....	4
How soon will I get a decision?.....	4
Can I vary what a disposal permit authorises? .....	4
General environmental duty.....	4
Are any offences related to disposal permits?.....	5
Where can I get further information? .....	5
References.....	5
Appendix A—sections 424 and 425 of the <i>Environmental Protection Act 1994</i> .....	7
424    Removal and treatment or disposal of contaminated soil.....	7
425    Failure to comply with disposal permit.....	7

## Introduction

This document provides information about how to apply for a disposal permit to remove, and treat or dispose of contaminated soil. The Queensland Government's website: [Apply for a disposal permit](#) (DES, 2015) provides additional information.

## When is a soil disposal permit required?

You require a soil disposal permit if you wish to take any of the following actions:

- remove, and treat or dispose of, contaminated soil from land that is recorded in the environmental management register (EMR) or contaminated land register (CLR)
- bring into Queensland, and treat or dispose of, contaminated soil from contaminated land outside the State.

These actions are regulated under the *Environmental Protection Act 1994* (see [Appendix A—sections 424 and 425 of the Environmental Protection Act 1994](#) below)

You do not need a soil disposal permit if you are going to treat or manage the contaminated soil on its site of origin.

## What does a soil disposal permit authorise?

A disposal permit authorises the removal of a specific, maximum volume of soil from a particular parcel of land for transport to a specific location. The location would be either a licensed disposal site or a place where the soil is to be treated. The disposal permit does not authorise carrying out an environmentally relevant activity (ERA) where treatment or disposal of the soil would necessitate obtaining one; for example, when carrying out ERA 54 (Mechanic Waste Reprocessing) or ERA 55 (Other Waste Reprocessing or Treatment).

The permit may contain conditions that specify how particular activities associated with the disposal must be undertaken. Typically, the permit holder will be required to give a copy of the permit to everyone involved in the disposal activity. If the permit authorises the soil to be treated at a location other than one already managed under an environmental authority, the permit may also include conditions to ensure environmental harm does not result from treatment activities.

## Why is a soil disposal permit required?

The purpose of a soil disposal permit is to:

- manage the potential risk to human health and the environment that may occur during the removal, and transport of contaminated soil
- ensure that contaminated soil is disposed of appropriately
- ensure that the disposal of contaminated soil does not result in the creation of new contaminated sites.

## What if the land is not recorded in the EMR or CLR?

If the land is in Queensland and has contaminated soil, it is likely that it should be recorded in the EMR or CLR. If the land is not yet recorded in either register, you have a legal duty to notify the Department of Environment and Science (the department) about the contamination. It is an offence not to notify. The department's website, [Managing contaminated land—Duty to notify](#) (DES, 2015), provides advice about how and when you should notify.

## Is disposal the preferred option?

No, disposal is not the preferred option. The department actively supports the national targets for reduction in waste going to landfill, and promotes on-site remediation as the preferred option for dealing with contaminated soils.

The National Environmental Protection (Assessment of Site Contamination) Measures 1999 (*contaminated land NEPM*), Volume 1 (Assessment of Site Contamination Policy Framework) (NEPC, 2013), establishes a hierarchy of remediation options. In that hierarchy, disposal to landfill is the least preferred option, and should be used only when no other method is available for remediating the soil(s). The [National Remediation Framework](#) provides a nationally consistent approach to remediating and managing contaminated sites that is recognised as best practice.

For soil contaminated by per- and/or poly-fluoroalkyl substances (PFAS), the *PFAS National Environmental Management Plan* (Heads of EPAs of Australia and New Zealand, 2018) provides additional guidance.

## What if disposal of contaminated soil is the only option?

If disposal is the only viable option for some contaminated soil, you should make every effort to reduce the volume of soil requiring disposal.

You should undertake a detailed site investigation (see Schedule B2 of the contaminated land NEPM), based on field sampling and laboratory testing, to delineate the extent of contamination and determine the volume and level of contamination before commencing any excavation. This will allow you to plan the separation of contaminated soils from uncontaminated soils.

You should separate highly contaminated or leachable soils from clean soils and less contaminated soils that can be treated. Separation will reduce volumes requiring specific treatment or disposal, and will significantly reduce the treatment and disposal costs associated with highly contaminated soil.

For high strength waste, you must apply all reasonable and practicable treatments prior to disposal to landfill.

Reducing contaminant concentrations by diluting (for example, by adding clean soil or less contaminated soil) is not an acceptable remediation strategy. Similarly, disposal of clean fill with contaminated soil is not acceptable.

## Who can undertake the detailed site investigation?

A *suitably qualified person* must undertake the detailed site investigation (see Chapter 12, Part 3 of the *Environmental Protection Act 1994*). A suitably qualified person has relevant tertiary qualifications, several years' experience in contaminated land investigations, and membership of a prescribed organisation (see Schedule 8 of the *Environmental Protection Regulation 2008*).

## Do I need the landowner's consent?

Yes. If you are the lessee or occupier of the land, or you are acting on behalf of the landowner, you must provide written consent from the landowner to the proposed removal and treatment or disposal of the soil. Their written consent must accompany your application for a disposal permit.

## Do I need the landfill operator's consent?

Yes. With your application, you must provide an acceptance letter from the operator of the landfill to which the soil would be taken for disposal. The landfill acceptance letter must include the following information:

- address and lot on plan details of the site from which the soil will be removed
- address and lot on plan details of the site to which the soil will be taken for disposal
- identification details of the environmental authority that regulates the disposal landfill
- compliance statement from the landfill operator confirming they are meeting the conditions of their environmental authority
- total volume of the soil to be received at the landfill
- disposal method(s) (e.g. in lined or unlined landfill)
- laboratory testing results that explain why a lined and/or unlined disposal area will be use for all or portions of the soil.

## Can I get advice before submitting my application?

Yes. The department provides a pre-lodgement advice service. You may apply for a pre-lodgement meeting through the department's website: [How to apply for environmental licence or permit](#) (DES, 2018).

If you intend to apply for a disposal permit that may involve a significant transport distance, or you are not sure you can achieve any of the regulatory requirements, you should apply for a pre-lodgement meeting. This service may reduce delays and potential problems.

If you intend to transport contaminated soils into Queensland from another state, you should contact that state's jurisdiction regarding approvals you may require to take the soil out of the state.

## Is there an approved form for my application?

Yes. You must make your application in the approved form, *Application for a disposal permit for contaminated soil*, which is available from the department's website: [Forms: waste](#) (DES, 2018)

## Is there a fee for my application?

At present, there is no fee for your application for a disposal permit.

## What information must my application provide?

In addition to being made in the approved form, your application must be supported by enough information to enable the department to decide whether to issue the permit. The supporting information must assess the likely risks to the environment from the removal and treatment or disposal of the contaminated soil. You may attach reports and other relevant documents to the approved form.

Your application must provide at least the following information:

- applicant details (this person would become the permit holder)
- address and lot on plan details of the site from which the soil will be removed
- a copy of the current certificate of title for the land from which the soil will be removed
- total volume (m<sup>3</sup>) of soil to be removed (this must be the bulk/loose size after excavation, not the bank volume)
- disposal period (start and end dates for the removal)
- address and lot on plan details of the site to which the soil will be taken for treatment or disposal
- details of the management and remediation options already applied to the contaminated soil, with a detailed explanation of why removal and treatment or disposal is considered the only remaining option for the proposed volume of soil
- description of the sampling locations, depths, methods, sample preservation, quality assurance, and chain of custody
- scaled plan(s) of the sampling locations and the extent of contaminated soil
- chemical and physical characteristics of the soil for all hazardous contaminants (including any hazardous transformation products), you propose to remove (this should reference the sampling locations and depths, and testing results for individual samples—an averaged result for the site will not be sufficient)
- results of representative soil samples using the Toxicity Characteristic Leaching Procedure (TCLP), and Australian Standard Leaching Procedure (ASLP) using unbuffered leach solution
- copies of laboratory results, quality assurance documentation, and sample receipts for all analysed samples, noting how limits of detection/reporting were low enough to screen for all potential risks
- a sampling plan that would validate that all the contaminated soil has been removed.

The contaminated land NEPM, Victoria EPA's soil sampling guidelines (EPA Vic, 2009), and Australian Standards AS 4482.1–2005 and AS 4482.2–1999 are examples of best practice in soil sampling and site characterisation. For PFAS, the requirements of the PFAS National Environmental Management Plan also apply.

Your supporting data and information must be recent and current. Historical data from several years ago will not be acceptable. You must demonstrate that your sampling, analysing and reporting accurately reflects the current condition of the site.

## Where should I send my application?

You should send your application and its supporting information to:

Postal address:

Permit and Licence Management  
Department of Environment and Science  
GPO Box 2454  
Brisbane QLD 4001

Email: [palm@des.qld.gov.au](mailto:palm@des.qld.gov.au)

## How will the department decide the application?

In accordance with the legislation, when deciding whether to refuse or grant an application for a soil disposal permit the department must consider the standard criteria, which are defined in Schedule 4 of the Environmental Protection Act. In addition, the department will consider the following matters:

- your application and its supporting information
- the hierarchy of remediation options contained in the contaminated land NEPM
- best practice environmental management for the removal, treatment and disposal of contaminated soil
- any applicable environmental protection policy
- any applicable site investigation report or validation report or site management plan
- any applicable Commonwealth, State or local government plans, standards, agreements or requirements
- public Interests
- the receiving environment.

## How soon will I get a decision?

The department will decide your application within 10 business days after receiving it.

If the department approves your application, you will receive the disposal permit within eight business days of the decision being made. If the department imposes conditions on the permit, you will also receive an information notice about the conditions.

If the department decides to refuse your application, you will receive an information notice about the decision within eight business days of the decision being made.

You should not assume that a disposal permit will be granted whenever an application is made. Consequently, you should not undertake any activities (e.g. earthworks) that would potentially cause environmental harm, or make remediation or management of the contaminated soil difficult, if a disposal permit is refused.

## Can I vary what a disposal permit authorises?

The department cannot change a permit after it has been issued. For example, if you wish to exceed the specified volume, you will need to apply for a new permit for disposal of any additional contaminated soil.

## General environmental duty

In addition to whatever conditions the disposal permit might impose, the Environmental Protection Act (s. 319) imposes a general environmental duty on everyone. The general environmental duty states:

A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm.

In practice, this means that you must use controls when excavating, removing, treating and/or disposing of contaminated soil that ensure environmental harm is not caused. For example, there must be no unpermitted release of contaminated soil to air, land or water.

In respect of water pollution, s. 440ZG of the Environmental Protection Act imposes the following additional requirements.

A person also must not unlawfully deposit a prescribed water [contaminant](#) in waters, any roadside gutter or stormwater drainage; or another place so that the contaminant could reasonably be expected to wash, blow, fall or otherwise move into waters, a roadside gutter or stormwater drainage.

A person must also not unlawfully release stormwater run-off into waters, a roadside gutter or stormwater drainage that results in the build-up of earth in waters, a roadside gutter or stormwater drainage.

Schedule 10 of the Environmental Protection Regulation 2019 provides a full list of prescribed water contaminants.

Listed below are examples of actions you could take to ensure you meet your general environmental duty:

- cover loads of contaminated soil to prevent spillage and/or windblown dust during transport
- manage stockpiles of contaminated soil to ensure soil, or other contaminants (such as asbestos fibres or leachable contaminants) are not spread by runoff, wind or other means, and that noxious or offensive odours are not released
- only transport contaminated soil in suitable vehicles and containers designed to prevent spillage
- contain and clean any spilled contaminated soil as quickly as possible from transport loading areas
- clean contaminated soil spills and dust from the outside of transport vehicles after loading and unloading to prevent the spread of contamination.

## Are any offences related to disposal permits?

Yes. If you do not have disposal permit, it is an offence under s. 424 of the Environmental Protection Act to remove and treat or dispose of contaminated soil from land recorded in the EMR or CLR, or to bring into the State and treat or dispose of contaminated soil from contaminated land outside of the State.

Also, it is an offence under s. 425 of the Environmental Protection Act for a permit holder, or a person acting under a disposal permit, not to comply with the conditions of the permit.

The penalty for committing an offence under s. 425 or s. 424 is 100 penalty units.

If the administering authority has reason to believe a person has not complied with the conditions of their permit, it can issue a notice requesting information about, among other things, how much contaminated soil was disposed of under the permit as shown on the acceptance receipts from the owner or operator of the approved disposal site.

Improper disposal or treatment of contaminated soil may also constitute other offences under the Environmental Protection Act, such as those related to causing environmental harm or carrying out environmentally relevant activities without the required environmental authority.

## Where can I get further information?

You can get further information by arranging a pre-lodgement meeting (see above) or by contacting the Contaminated Land Unit through the following means:

Postal address:

Contaminated Land Unit  
Department Environment and Science  
GPO Box 2454  
Brisbane Qld 4001

In person: Level 3, 400 George Street, Brisbane

Phone: 13 QGOV (13 74 68)

email: [emr.clr.registry@des.qld.gov.au](mailto:emr.clr.registry@des.qld.gov.au)

website: [www.des.qld.gov.au](http://www.des.qld.gov.au).

## References

Department of Environment and Science 2015, *Apply for a disposal permit*, Queensland Government, viewed 8 July 2019, <<https://www.qld.gov.au/environment/pollution/management/contaminated-land/permits/disposal-permit>>.

Department of Environment and Science 2018, *Forms: waste*, Queensland Government, viewed 8 July 2019, <<https://environment.des.qld.gov.au/forms/waste.html>>.

Department of Environment and Science 2018, *How to apply for environmental licence or permit*, Queensland Government, viewed 8 July 2019, <<https://environment.des.qld.gov.au/licences-permits/how-to-apply/>>.

Department of Environment and Science 2015, *Managing contaminated land—Duty to notify*, Queensland Government, viewed 8 July 2019, <<https://www.qld.gov.au/environment/pollution/management/contaminated-land/assessing/notifications>>.

Environment Protection Authority Victoria 2009, *Soil sampling*, Industrial Waste Resource Guidelines, Victorian Government, viewed 13 July 2019, <<https://www.epa.vic.gov.au/our-work/publications/publication/2009/june/iwrg702>>

Heads of EPAs of Australia and New Zealand 2018, PFAS National Environmental Management Plan, Heads of EPAs of Australia and New Zealand, viewed 3 April 2020, <[https://www.epa.vic.gov.au/-/media/epa/files/for-community/pfas-national-environmental-management-plan/final\\_pfas-nemp-20180110.pdf](https://www.epa.vic.gov.au/-/media/epa/files/for-community/pfas-national-environmental-management-plan/final_pfas-nemp-20180110.pdf)>.

National Environment Protection Council 2013, National Environment Protection (Assessment of Site Contamination) Measure 1999, National Environment Protection Council, viewed 8 July 2019, <<http://www.nepc.gov.au/nepms/assessment-site-contamination>>.

National Remediation Framework 2020, *National Remediation Framework overview*, CRC CARE, viewed 16 June 2020, <<https://www.remediationframework.com.au/>>.

Standards Australia 1999, *Guide to the sampling and investigation of potentially contaminated soil, Part 2: Volatile substances*, AS 4482.2–1999, Standards Australia, Homebush.

Standards Australia 2005, *Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds*, AS 4482.1–2005, 2<sup>nd</sup> edn, Standards Australia, Sydney.

## **Appendix A—sections 424 and 425 of the *Environmental Protection Act 1994***

Sections 424 and 425 of the *Environmental Protection Act 1994* regulate the removal and treatment or disposal of contaminated soil, and disposal permits. However, ss. 424 and 425 are not included in current reprints of the Act. Nevertheless, they remain in force because of s. 739 of the Act. No date has been set yet for when ss. 424 and 425 will cease to have force. The wording of ss. 424 and 425 is provided below.

### **424 Removal and treatment or disposal of contaminated soil**

- (1) A person must not, without a disposal permit—
  - (a) remove and treat or dispose of contaminated soil from land for which particulars are recorded in the environmental management register or contaminated land register; or
  - (b) bring into the State and treat or dispose of contaminated soil from contaminated land outside the State.Maximum penalty—100 penalty units.
- (2) An application for a disposal permit must—
  - (a) be in the approved form; and
  - (b) be supported by enough information to enable the administering authority to decide the application, including, for example, relevant information about the likely risks to the environment and how it is intended to dispose of the contaminated soil; and
  - (c) be accompanied by the application fee prescribed under a regulation.
- (3) The administering authority must decide the application within 10 business days after receiving it.
- (4) In making its decision whether to grant or refuse an application for a disposal permit, or the conditions of the permit, the administering authority must consider the standard criteria.
- (5) The administering authority must within 8 business days after making its decision—
  - (a) if the decision is to grant the application—give the applicant the permit; or
  - (b) if the decision is to grant the application but to impose conditions on the permit—give the applicant an information notice about the decision to impose the conditions; or
  - (c) if the decision is to refuse the application—give the applicant an information notice about the decision.
- (6) If the administering authority fails to make a decision about an application for a disposal permit within the time it is required to make a decision on the application, the failure is taken to be a decision by the authority to refuse the application at the end of the time.
- (7) A disposal permit takes effect from the day of its issue, or a later day stated in it, and continues in force for the term stated in it.
- (8) This section does not apply if the person is removing and disposing of the soil under a remediation notice.

### **425 Failure to comply with disposal permit**

The holder of, or a person acting under, a disposal permit, must comply with the conditions of the permit.

Maximum penalty—100 penalty units.