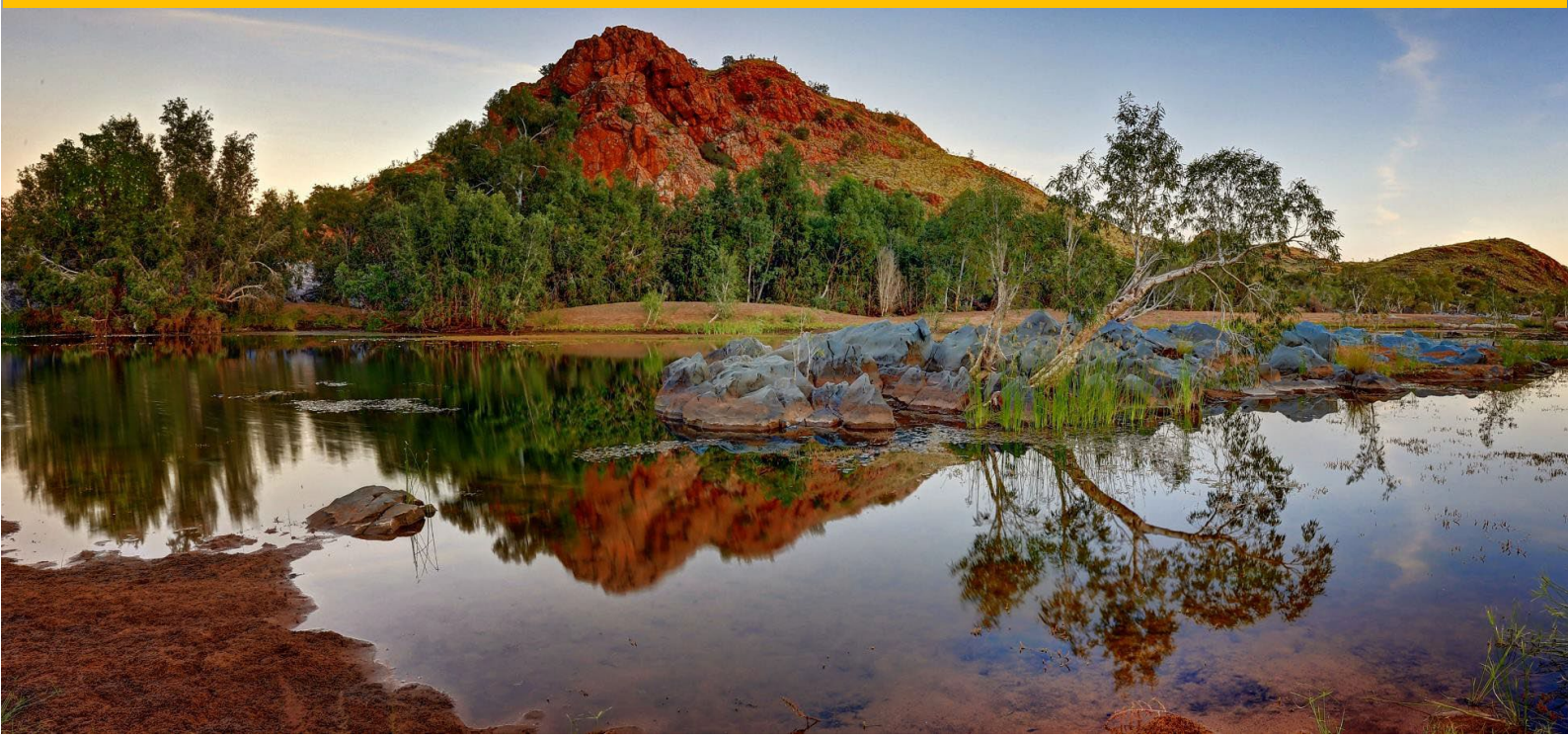
PILBARA
environmental services
A Cleanaway - Kingkira joint venture



Contaminated Waste Acceptance FAQ

Pilbara Regional Waste Management Facility

June 2022

Here are some frequently asked questions relating to the disposal of waste under the key areas of:

- CLASSIFICATION
- SAMPLING
- DISPOSAL

CLASSIFICATION

What is the Landfill Waste Classification and Waste Definitions1996 (as amended 2019)?

Developed by the Department of Water and Environmental Regulation (DWER), understanding this document is a must, as it provides guidance and criteria to be applied in determining the classification of waste for acceptance to landfills.

What kinds of waste classes are there?

Waste is categorised into the following:

Class I: solid waste that has little to no harmful environmental effect and can be accepted to an unlined landfill for burial

Class II: solid waste at or below Class II contaminant thresholds, including solid waste that can become putrid such as municipal waste and any other waste containing organic material from animal or vegetable origins.

Class III: solid waste at or below Class III contaminant thresholds. Examples include contaminated soils that contain chemical substances at concentrations above background levels and/or have the potential to harm human health and/or the environment. Class III landfills are lined and may include leachate collection.

Class IV: solid waste at or below Class IV contaminant thresholds. Examples include contaminated soils that contain chemical substances at concentrations above background levels and/or have the potential to harm human health and/or the environment. Class IV landfills are double-lined and include leachate collection. They are primarily designed to accept contaminated soils (including encapsulated wastes for burial.

Class V: solid waste that is difficult to treat or dispose because of its toxicity or physical or chemical characteristics, such as radioactive waste.

What class is my waste?

The class of waste material is generally determined by the types of contaminants and their concentration. Even though each contaminant is compared to the threshold individually, some contaminants even in relatively low concentrations are more toxic, and therefore have different licencing conditions. The presence of such contaminants even in low concentrations will determine acceptance at a particular site.

What is a contaminant?

A contaminant is a material that can potentially cause harm to human health and/or the environment. The degree to which it can cause harm is related to the concentration value of the contaminant. The main types of contaminants that are analysed are:

- Metals such as lead and mercury.
- Inorganics such as cyanide and fluoride.
- Organics including a range of hydrocarbons; and
- Per- and poly-fluoroalkyl substances.

Refer to Table 3 from the Landfill Waste Classification and Waste Definitions1996 for a full list of contaminants for metals, inorganics and organics. For organic and inorganic chemical contaminants not listed in the tables, contact the DWER for assessment/disposal requirements.

SAMPLING

What is my sampling technique?

Sampling is required for waste acceptance, with the sampling method dependent on the storage or production method. There are five typical storage methods:

- Bulk Stockpiled waste;
- In-situ contaminated soils;
- Packaged waste – no previous sampling (referred to as Case 1 in the Guidelines);
- Packaged waste – some understanding of likely contaminants (referred to as Case 2 in the Guidelines).
- Packaged waste – homogenous process waste and good understanding of contaminants from previous analysis (referred to as Case 3 in the Guidelines).

How many samples do I need to take?

For Bulk Stockpiled Waste:

Bulk stockpiled waste has usually been excavated from a contaminated site or is industrial waste that has been stockpiled or stored in a skip bin or similar. A reasonably accurate volume should be able to be ascertained by the applicant. This will dictate the number of samples that need to be collected.

To determine whether the appropriate number of samples has been collected from bulk waste, refer to the table below:

Bulk Stockpiled Waste	**Quantitative Assessment**
$<100m^3$	3 samples
$100m^3$ to $200m^3$	4 samples
$200m^3$ to $500m^3$	6 samples
$500m^3$ to $1,000m^3$	8 samples
$1,000m^3$ to $2,000m^3$	11 samples
$2,000m^3$ to $3,000m^3$	15 samples
$3,000m^3$ to $4,000m^3$	18 samples
$4,000m^3$ to $5,000m^3$	20 samples
$5,000m^3$ to $10,000m^3$	24 samples
$> 10,000m^3$	Take 24 samples for volumes $5,000m^3$ to $10,000m^3$, plus 4 more samples for each additional $10,000m^3$

In-Situ Contaminated Soils:

In-situ assessment of contaminated soils is becoming more commonplace to minimise double handling of soils and to reduce equipment hire costs. Please note that the stockpile sampling numbers in the Guidelines **do not apply to bulk in-situ contaminated soils** unless the applicant can demonstrate the contaminated soil is homogenous with previous sampling results. If it is not homogenous, a different sampling methodology will need to be developed based on the WA Contaminated Waste Guidelines and an option may be to employ a consultant to assist.

For Packaged Waste:

Most packaged wastes are stored in 205L drums, $1m^3$ or $2m^3$ bulka bags or $1m^3$ intermediate bulk containers (IBCs).

The sampling program for packaged wastes varies depending on how much is known about the waste.

Where there is no knowledge of source or composition:

No. Containers	**Sampling Requirements**	**Value to be compared with Waste Classification Criteria**
1 to 3	♦ 3 samples per container ♦ One top third, one middle third, and one bottom third from each container	Mean of sample analyses
> 3	♦ 3 containers selected randomly and sampled as for 1 to 3 containers above ♦ 1 sample from each other container, with depth selected randomly	Mean of analyses plus one standard deviation

Where the source is known and likely composition is known, but there is no analytical data on the packaged waste:

No. containers	Sampling Requirements	Value to be compared with waste classification criteria
1 to 3	♦ 1 sample per container ♦ Randomly selected sampling depth	All sample analyses to be below criteria.
3 to 6	♦ 3 containers selected randomly, and 1 sample taken from each at a depth selected randomly ♦ 1 sample from one of the remaining containers, with container and depth selected randomly	
>6	♦ 3 containers selected randomly, and 1 sample taken from each at a depth selected randomly ♦ 1 sample from each set of 3 (or part thereof) remaining containers, with containers and depths selected randomly	All sample analyses to be below criteria.

Where source is known, and analytical data is available on process.

The level of sampling will be minimal and will depend mainly on:

- Type and levels of contaminants;
- Number of containers;
- Type and reliability of the process;
- Level of management and technical control on the process; and
- Toxicity of contaminants involved.

What contaminants do I test for?

Analytical requirements vary depending on the type of waste and what contaminants are likely to be present. Contaminants of potential concern (COPC) should be identified from the type of industry or process that created the waste. It is the responsibility of the waste generator to appropriately identify likely contaminants. It is recommended that guidance is sought from the PES Environmental and Technical Manager regarding the necessary analysis to be conducted for your waste.

Where do I send my samples for analysis?

You must send your samples to a NATA accredited laboratory.

Refer to www.nata.com.au for details or to search for a NATA accredited lab click here.

DISPOSAL

How can I dispose of asbestos sheeting or asbestos contaminated soil?

Asbestos is considered a 'Special Waste' that is hazardous to human health and needs special management techniques to dispose of safely within a specified class of landfill.

There are two kinds of asbestos – non-friable which is the most common (i.e., fencing and roofing sheets) and friable which is less common and can be easily crumbled to a fine powder by hand and **should only be removed by a licensed asbestos removal specialist**. Pilbara Regional Waste Management Facility is licenced to accept both types.

If you need to dispose of asbestos contaminated soil, then it must be damp to supress dust, double wrapped in HDPE plastic and secured with tape to form a secure package for transport to Pilbara Regional Waste Management Facility. Alternatively, it can be loaded into secured double-HDPE-lined bulka bags to help facilitate loading and unloading.

Asbestos contaminated soils require a waste application. A dust suppression fee will apply.

What do I do with Acid Sulphate Soils?

Acid sulphate soil may only be accepted at Pilbara Regional Waste Management Facility if it has been treated to neutralise the acid-forming potential prior to disposal. To view the guidelines, click here.

OTHER INFORMATION

What are the fees to dispose of my waste?

Fees vary according to classification, quantity, and handling requirements. It is best to contact the Pilbara Environmental Services Environmental and Technical Manager on 0499 309 348, for a current fee for waste.

Large volumes of waste may attract a discounted rate for disposal.

Do I need to wait for an approval prior to disposing waste?

Yes, you must submit your lab results for assessment, and once approval is granted, take your approval document with you to present to the weighbridge attendant.

How long will it take for a waste acceptance approval to be issued?

This process generally takes one to two working days if all the required information is submitted.

When can I take my waste to the Pilbara Regional Waste Management Facility?

Operating hours are:

Monday to Friday	8:00am to 4:00pm and by appointment
Saturday	By Appointment

Delivery of the waste must be booked in with Pilbara Regional Waste Management Facility Waste Management Facility at least 24 hours in advance for a fixed delivery time.