

## UTILITY SERVICES

TOWNSVILLE WASTE SERVICES



TOWNSVILLE CITY COUNCIL  
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FROM: **Townsville Waste Services**  
PHONE: 1300 878 001  
FAX NUMBER: 07 4773 8300  
EMAIL: [Group-TWS-RegWasteAssessment@townsville.qld.gov.au](mailto:Group-TWS-RegWasteAssessment@townsville.qld.gov.au)

### COMMENTS:

#### CONTAMINATED LAND REQUIREMENTS AND LANDFILL ACCEPTANCE CRITERIA AS REQUESTED.

1. Letter of request from the Owner or Owner's Consultant is required for the disposal of contaminated soil/material at the Townsville City Council Landfill facilities.
2. All applications to be submitted to: [Group-TWS-RegWasteAssessment@townsville.qld.gov.au](mailto:Group-TWS-RegWasteAssessment@townsville.qld.gov.au). Applications not submitted to this email may result in a delay to the processing period.
3. Applications may take up to 8 days to process.
4. All applications attract an application fee. This fee will be charged at the time of disposal. In the event that your application is not approved, payment will need to be made via our customer service centre 1300 878 001. Current fees and charges schedule is available via our website [www.townsville.qld.gov.au](http://www.townsville.qld.gov.au).
5. The letter of request must be accompanied by:
  - Relevant site contamination reports;
  - TLCP results for the soil/material;
  - Contaminant results for the soil/material;
  - Volume of soil/material;
  - Environmental Protection Agency Section 424 approval for removal off-site if required (Contaminated land unit 07 3227 7983); and
  - Tentative date for disposal.

A handwritten signature in black ink, appearing to read "Phil Gausden".

**Phil Gausden**  
**Coordinator Business Operations**

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## **TOWNSVILLE CITY COUNCIL LANDFILL ACCEPTANCE CRITERIA**

### **BACKGROUND INFORMATION**

Selected solid industrial wastes which are known to contain hazardous constituents are presently accepted for special burial, provided these wastes comply with strict acceptance criteria defined by the Townsville City Council.

This criteria is for solid waste only. It refers to the regulated waste permitted to be disposed of at Townsville City Council Landfill facilities in accordance with Environmental Licence Number EPPR00962513, dated 15 April 2014.

Four characteristics are used to identify the hazardous nature of wastes and their suitability for disposal to landfill:

- ignitability
- corrosivity
- reactivity
- toxicity.

1. **Ignitability**

Solid industrial wastes that are capable of causing a fire when ignited through friction, absorption of moisture, or spontaneous chemical changes under standard temperature and pressure are hazardous.

2. **Corrosivity**

Solid industrial wastes which on dissolution exhibit a pH of 2 or less or 12.5 or greater are hazardous.

**N.B Acid Sulfate Soils may be accepted for treatment at the Stuart Landfill. Please phone Townsville Waste Services on 1300 878 001 for acceptance requirements.**

3. **Reactivity**

Solid industrial wastes are hazardous if they have any of the following reactive properties:

- react violently with water;
- form potentially explosive mixtures with water;

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- generate toxic gases, vapours, or fumes dangerous to human health or the environment when mixed with water;
- contain substances which generate toxic gases, vapours, or fumes when exposed to pH conditions between 2 and 12.5;
- are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement;
- are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

#### 4. Toxicity

Solid industrial wastes will be classified as hazardous and require special management if:

- leaching contaminant levels in the solid waste when measured in accordance with the USEPA Toxicity Characteristic Leaching Procedure (TCLP Test) exceed the allowable concentrations for approved municipal landfills as specified in the attached table.

Other regulated wastes approved for disposal are:

- asbestos waste (for special burial);
- tyres;
- abattoir effluent (dewatered solids only);
- bacterial sludges (septic tank and sewage) (dewatered solids only);
- Fish processing wastes (liquid waste streams to be prohibited);
- Food processing wastes (liquid waste streams to be prohibited);
- Grease interceptor trap effluent and residues (dewatered solids only);
- Potentially Infectious clinical and related wastes which have been effectively treated to render them non-infectious;
- Poultry processing wastes (liquid waste streams to be prohibited); and
- Solid pharmaceutical products rendered unrecognisable (other than any substances listed under Schedule 8 of the Poisons Regulations 1978 and cytotoxic wastes).

## Prohibited Wastes

The following wastes are not accepted at the landfill:

- Liquescent waste streams or any waste capable of yielding free liquids;
- Untreated infectious and chemical wastes and liquid pharmaceuticals from clinical and related waste stream;
- Cytotoxic waste;
- Untreated sharps;
- S8 pharmaceuticals;

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- All radioactive wastes, unless otherwise approved under the Radioactive Substances Act 1958;
- Pyrophoric wastes (where co-disposed with other potentially combustible);
- Explosives, ammunition, pyrotechnics or propellants; and
- Any substances which fall into the categories of ignitability, corrosivity, reactivity and radioactivity.

## Special Handling

Because of its chemical/physical properties waste may require special handling. Some material may comply with leachate tests but have an overall contamination which exceeds safe practice. These levels are shown in brackets in the Total Contamination scale; a handling fee may apply.

## PFOS / PFOA Acceptance

Townsville City Council will accept material containing PFOS / PFOA based on the Model Operating Conditions ERA-Waste disposal Version 1, Table 6 - Maximum total contaminant levels of soils used as cover material of:

CONTAMINANT ANALYSIS	MAXIMUM CONTAMINANT CONCENTRATION IN SOLID WASTE (mg/kg)	ALLOWABLE LEACHING CONTAMINANT LEVELS (mg/L)
PFOS (Perfluoro-octanoic sulfate)	6	
PFOA (Perfluoro-octanoic acid)	16	
Total fluoro organic compounds (excluding PFOS/PFOA)	10	
Total fluorinated organic compounds (if leachate not reused on or off-site)		0.05

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CONTAMINANT ANALYSIS	MAXIMUM CONTAMINANT CONCENTRATION IN SOLID WASTE (mg/kg)	ALLOWABLE LEACHING CONTAMINANT LEVELS (mg/L)
<b>Non Specific Contaminants</b>		
BOD		20,000
Total Organic Carbon		10,000
Petroleum Hydrocarbons		50
<b>Metals/Non-Metals</b>		
Antimony		5.0
Arsenic		5.0
Barium		100.0
Cadmium		0.5
Chromium		5.0
Cobalt		5.0
Copper		100.0
Lead		5.0
Mercury		0.1
Molybdenum		1.0
Nickel		5.0
Selenium		1.0
Silver		5.0
Thallium		1.0
Tin		3.0
Vanadium		5.0
Zinc		500.0
<b>Inorganic Anions</b>		
Bromide		50.0
Chloride		6,000
Cyanide (total)		5.0
Fluoride		150.0
Sulphate		4,000
Nitrate		1,000
<b>Monocyclic Aromatic Hydrocarbons (MAH)</b>		
Benzene	20	1.0
Ethyl Benzene	1000	50.0
Toluene	600	30.0
Xylene	500	20.0
Total MAH	1000	50.0

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CONTAMINANT ANALYSIS	MAXIMUM CONTAMINANT CONCENTRATION IN SOLID WASTE (mg/kg)	ALLOWABLE LEACHING CONTAMINANT LEVELS (mg/L)
<b>Polycyclic Aromatic Hydrocarbons (PAH)</b>		
Anthracene		0.7
Benzo (a) anthracene		0.05
Benzo (a) phenanthrene		0.05
Benzo (a) pyrene		0.02
Benzo (b) floranthene		0.05
Benzo (k) floranthene		0.05
Chrysene		0.1
Dibenz (a,h) anthracene		0.02
Dibenz (a,h) pyrene		0.1
Dimethylbenz (a) anthracene		0.05
Fluoranthene		0.2
Indeno (1,2,3-Cd) pyrene		0.1
Napthalene		0.7
Phenanthrene		0.1
Pyrene		0.7
Total PAH	1000	1.0
<b>Phenolic Contaminants</b>		
<u>Non halogenated compounds</u>		
Phenol	250	10.0
m-Cresol	500	20.0
o-Cresol	500	20.0
p-Cresol	500	20.0
Total non-halogenated phenol	500	
<u>Halogenated phenols</u>		
Chlorophenol	5	0.1
Trichlorophenol	20	1.0
Pentachlorophenol	20	1.0
Total halogenated phenol	20	
<b>Chlorinated Hydrocarbons</b>		
<u>Chlorinated Aliphatic Compounds</u>		
Carbon Tetrachloride	10	0.3
1,2 Dichloroethane	20	1.0
1,1 Dictloroethene	1	0.03
Tetrachloroethene	20	1.0
Trichloroethene	25	3.0
Total chlorinated aliphatic	50	
<u>Chlorinated Aromatic Compounds</u>		
Chlorobenzene	200	10.0
Hexachlorobenzene	1	0.02
Total chlorinated aromatic	200	

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CONTAMINANT ANALYSIS	MAXIMUM CONTAMINANT CONCENTRATION IN SOLID WASTE (mg/kg)	ALLOWABLE LEACHING CONTAMINANT LEVELS (mg/L)
<b>Pesticides</b>		
<u>Organochlorine</u>		
Aldrin		0.01
Chlordane		0.06
Chlorpyrifos		0.03
Dieldrin		0.01
DDT		0.03
Endrin		0.01
Heptachlor		0.03
Lindane		1.0
Methoxychlor		1.0
Toxaphene		0.05
Total organochlorine pesticides	10	
<u>Herbicides</u>		
2,4-D		1.0
2,4-DB		2.0
MCPA		2.0
2,4,5-T		0.02
Total herbicides	50	
<u>Carbamates</u>		
Carbaryl		0.6
Carbofuran		0.3
Total carbamate pesticides	50	
<u>Organophosphorus</u>		
Diazinon		0.1
Parathion		0.3
Methyl Parathion		0.06
Total organophosphorus pesticides	10	
Atrazine		0.03
Simazine		0.03
CONTAMINANT ANALYSIS	MAX. CONTAMINANT LEVELS IN SOLID INDUSTRIAL REFUSE (mg/kg)	
<b>Petroleum Hydrocarbons</b>		
Total Petroleum Hydrocarbons C6-C9)	1,000	
Total Petroleum Hydrocarbons (C10-C14)	10,000	
Total Petroleum Hydrocarbons (C15-C28)	50,000	
Total Petroleum Hydrocarbons (C28 -C36)	50,000	
CONTAMINANT ANALYSIS	MAX. CONTAMINANT LEACHING LEVEL (mg/L)	
Total Petroleum Hydrocarbons (TCLP)	50	