

SOLID WASTE ACCEPTANCE PROTOCOL: MANITOBA

This form will assist you in identifying if the waste(s) can be accepted and assist in the analytical testing requirements.

SECURE Class II Landfills will only accept solid, non-dangerous oilfield and non-hazardous Industrial wastes.

EXAMPLES OF COMMON ACCEPTABLE SOLID WASTES (NO FREE LIQUIDS)

1. Activated Carbon
2. Asbestos
3. Catalyst(s) Sulphur and Non-Sulphur
4. Cement (Crushed, Dry Returns)
5. Contaminated Debris and Soil(s) with:
 - Chemical/Solvent(s)
 - Crude Oil/Condensate
 - Mercury/Metals
 - Methanol
 - Produced/Salt Water
 - Refined Fuel(s) (i.e. Gasoline)
 - Sulphur
6. Construction and Demolition (C&D) Debris
7. Desiccant(s)/Molecular Sieve(s)
8. Drilling Mud(s)/Cuttings:
 - Advanced Gel Chem
 - Gel Chem
 - Invert
 - Potassium Chloride (KCl)
 - Potassium Sulphate (K₂SO₄)
9. Frac Sand (non-radioactive)
10. Incinerator Ash
11. Sand – Produced
12. Sludge - No Free Liquids (Solids ONLY)
from:
 - Hydrocarbon
 - Lime
 - Process
 - Sulphur
13. Treated Wood/Wood Waste (e.g. railway ties)
14. Treatable Solid Waste (Hydrocarbon impacted, Refined fuel impacted solids)
(Treatment Pad ONLY)

PROHIBITED WASTES

1. Free Liquids
2. Hazardous Solid Waste as defined in:
 - **Manitoba Hazardous Waste Regulation** (as amended)
3. Radioactive Material
4. Medical or Bio-medical Waste
5. Putrescible Waste (e.g. animal carcasses)
6. Explosives
7. Reactive Material

LANDFILL DISPOSAL CRITERIA

The following is a list of landfill disposal criteria that may be required based on the description, origin and history of the solid waste:

- Analytical data provided must support the non-hazardous solid waste classification
- Analytical data provided must be current (not older than one (1) calendar year)
- It is the responsibility of the waste generator to determine the characteristics of the waste
- Un-used non-hazardous solid products require a SDS/Data Sheet

MULTI-WELL PADS

- SECURE Application Form (SAF) and analytical is required for each surface location;
- All downholes are to be listed on the SAF;
- An analytical is required for each drilling product for every SAF; and
- If the product or formation changes, an updated analytical is required

CLASS II INDUSTRIAL LANDFILL DISPOSAL CRITERIA

The following list of common compounds and associated regulatory levels are the maximum allowable concentrations for solid waste that can be accepted at SECURE Saskatchewan Industrial Landfills. Any material that exceeds these limits will not be approved for disposal.

Note: Refer to the “SECURE MANITOBA INDUSTRIAL LANDFILL ANALYTICAL REQUIREMENTS” following this page for the specific analysis required based on the waste stream description.

CONSTITUENTS	REGULATORY	CONSTITUENTS	REGULATORY
Leachable BTEX:		Leachable:	
Benzene	0.5 mg/L	Naphthalene	100.0 mg/L
Toluene	2.4 mg/L	Nitrate	4500.0 mg/L
Ethylbenzene	0.24 mg/L	Nitrate/Nitrite	1000.0 mg/L
Xylenes	30 mg/L	Nitrite	320.0 mg/L
		PCB	< 50.0 mg/kg
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Leachable Metals:		Other:	
Arsenic	2.5 mg/L	Additionally, the waste must meet all of the following requirements:	
Barium	100.0 mg/L	<ul style="list-style-type: none"> • pH: Greater than (\geq) 2.0 and Less than (\leq) 12.5 • Flash Point: \geq 60°C (Degrees Celsius) • No Free Liquids can be present 	
Boron	500.0 mg/L		
Cadmium	0.5 mg/L		
Chromium	5.0 mg/L		
Lead	5.0 mg/L		
Mercury	0.1 mg/L		
Selenium	1.0 mg/L		
Silver	5.0 mg/L		
Uranium	10.0 mg/L		

Note(s):

- Not all regulated compounds are listed above. Please refer to the Manitoba Hazardous Waste Regulation for a complete list of analytical requirements

BASIC PARAMETERS

The following **basic** analytical testing is required for all wastes regardless of the composition:

FP – Flash Point for solid samples

LBTEX – Leachable Benzene, Toluene, Ethylbenzene and Xylene (TCLP Method)

LMETALS – Leachable metals (TCLP)

pH – pH of solid waste material

PFT – Paint Filter Test

SUPPLEMENTAL – WASTE SPECIFIC PARAMETERS

The following additional analysis **MAY** be required depending on the waste description and/or type (refer to guidance below). Additional analysis may be requested depending on the type of waste and source of generation.

EOX – Extractable Halogenated Organic Compounds (TCLP)

VOC – Volatile Organic Compounds (TCLP)

PAH – Polycyclic Aromatic Hydrocarbons

PCB – Polychlorinated Biphenyls

Spontaneous Combustion (Self-Heating)

Sulphur – Elemental Sulphur (S⁰) and Sulphides (S²⁻)

Water Reactivity (ΔT)

% ANC – % Acid Neutralizing Capacity – Additional testing recommended for Sulphur impacted wastes

% CCE – % Calcium Carbonate Equivalent – Additional testing recommended for Sulphur impacted wastes

WASTE SPECIFIC ANALYTIC PARAMETERS

WASTE DESCRIPTION	ANALYTICAL REQUIREMENTS
1. Activated Carbon	Basic and Spontaneous Combustion (Self-Heating) *
2. Catalyst (sulphur)	Basic, Elemental sulphur and sulphides, Spontaneous Combustion (Self-Heating) *
3. Catalyst (non-sulphur)	Basic, Spontaneous Combustion (Self-Heating) *
4. Desiccant(s)/Molecular Sieve(s)	Basic, Water Reactivity (ΔT)*

*Please contact the Facility Manager to discuss the requirements of these parameters.

Note: The analytical requirements for waste approval include but are not limited to those listed above. SECURE may request additional testing prior to issuing approval. If a waste differs from the descriptions above please contact the SECURE facility.

HELPFUL INFORMATION (Laboratory Requirements)

- Spontaneous combustion testing requires a four (4) liter pail of sample.
- BTEX sampling requires a 500 mL glass jar with no head space.
- Analytical reports must be the signed copy.