

SOLID WASTE ACCEPTANCE PROTOCOL: SASKATCHEWAN

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

SECURE Class II Landfill 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
 - Dry Cleaning/Industrial Related
 - Mercury/Metals
 - Methanol
 - Produced/Salt Water
 - Refined Fuel(s) (i.e. Gasoline)
 - Sulphur
6. Construction and Demolition (C&D) Debris
7. Desiccant(s)/Molecular Sieves(s)
8. Drilling Mud(s)/Cuttings:
 - Advanced Gel Chem
 - Gel Chem
 - Invert
 - Potassium Chloride (KCl)
 - Potassium Sulphate (K_2SO_4)
9. Frac Sand (non-radioactive)
10. Incinerator Ash
11. Sand – Produced
12. Sludge - No Free Liquids (Solids ONLY) from:
 - Flare Pit
 - Hydrocarbon
 - Lime
 - Process
 - Sulphur
13. Treated Wood/Wood Waste (e.g. railway ties)
14. Biosolid material- SECURE *Marshall Landfill ONLY*

PROHIBITED WASTES

1. Free Liquids
2. Hazardous Solid Waste as defined in:
 - [*Transportation of Dangerous Goods Regulations*](#) (Transport Canada, 2020)
 - [*Schedule 2, 5, 6 & 7 of Cross-Border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations \(2021\)*](#)
3. Municipal Solid Waste (MSW)
4. Radioactive Material
5. Medical or Bio-medical Waste
6. Putrescible Waste (e.g. animal carcasses)
7. Waste containing distillate invert mud systems with oxygen scavengers
8. Large metal objects (e.g. automobiles/white goods)
9. Explosives
10. 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 Marshall Industrial Landfill. Any material that exceeds these limits will not be approved for disposal.

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

CONSTITUENTS	REGULATORY	CONSTITUENTS	REGULATORY
BTEX:		Leachable:	
Leachable Benzene	0.5 mg/L	Nitrate/Nitrite	1000.0 mg/L
Toluene	100 mg/kg (Total)	Nitrite	320.0 mg/L
Ethylbenzene	100 mg/kg (Total)	Nitrate	4500.0 mg/L
Xylenes	100 mg/kg (Total)		
Leachable Metals:		PCBs:	
Arsenic	2.5 mg/L	PCB	50.0 mg/kg (Total)
Barium	100.0 mg/L		
Boron	500.0 mg/L		
Chromium	5.0 mg/L		
Lead	5.0 mg/L		
Mercury	0.1 mg/L		
Selenium	1.0 mg/L		
Uranium	10.0 mg/L		
Solvent Scan		Other:	
Carbon disulphide	100.0 mg/kg	Additionally, the waste must meet all the following requirements	
Cresols	200.0 mg/L	pH: Greater than ($\geq$) 2.0 and Less than ($\leq$) 12.5 Flash Point: > 60.5°C (Degrees Celsius) No Free Liquids can be present (US EPA Method 9095 Paint Filter Test)	
Nitrobenzene	2.0 mg/L		
Pyridine	5.0 mg/L		
Ethyl methyl ketone	200.0 mg/L		
Microbiology			
Total Coliform	1000.0 mpn/g		
E.Coli	100.0 mpn/g		

Note(s):

- Not all regulated compounds are listed above. Please refer to the [Transportation of Dangerous Goods Regulations](#) (Transport Canada, 2011) and Cross Border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations (2021)
- Dry Cleaner and/or other Industrial related impacted solids may require specific analytical parameters; please contact SECURE for full details

BASIC PARAMETERS

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

FP – Flash Point for solid samples

LB – Leachable Benzene (TCLP)

TTEX – Total Toluene, Ethylbenzene and Xylene(s) (mg/kg)

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)

Sol Scan – Landfill Solvent Screen in solid waste EPA 8240

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)*
5. Biosolid Material (Marshall Landfill)	Basic, Total Coliform, E.coli

***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.