

PURE Solid Waste Acceptance Protocol

Alberta Guidelines

The following guidelines will assist you in identifying what waste(s) can be accepted in our Class II Engineered Landfills, as well as the analytical testing requirements to ensure quick acceptance of your waste material.

Accepted Waste Streams

PURE Class II Landfills commonly accept the following waste streams:

- Contaminated Soil
- Contaminated Sediment
- Reclamation Soil
- Drill Cuttings
- Spill Materials
- Oil Processing Solids
- Lime Sludge
- Industrial Waste Solids
- Asbestos Waste
- Sulphur Impacted Soil
- Salt Impacted Soil
- Liner Disposal
- Construction and Demolition Debris

*Pure may accept any other waste stream that meets landfill disposal criteria

Prohibited Waste Streams

PURE Class II Landfills cannot accept the following waste streams:

- Hazardous Waste
- Dangerous Oilfield Waste
- Bulk Liquid
- Container(s) Containing Liquids greater than 5 liters
- Domestic Wastewater or Domestic Septage
- Explosive(s)
- Radioactive Materials as Defined under the Transportation of Dangerous Goods Regulation as Class 7
- Substances regulated by the Canadian Nuclear Safety Commission
- Biomedical Waste
- Municipal Solid Waste
- Ozone Depleting Substances, and
- NORM waste

Basic Parameters

The following basic analytical testing is required for all waste streams regardless of the composition:

- FP – Flash point for solid samples
- pH – pH of solid waste material
- LBTEX – Leachable BTEX (TCLP)
- LMETALS – Leachable metals (TCLP)
- PFT – Paint Filter Test
- Supplemental – Waste Specific Parameters



Please Note:

The analytical requirements for waste approval include, but are not limited to those listed in this document. PURE may request additional testing prior to issuing approval. If you have a waste stream not noted in this document, please contact PURE, as we may have a disposal method for the waste.

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Supplemental Analyticals

The following additional parameters MAY be required depending on the waste description and/or type. Please refer to guidance below:

- **Sol Scan** – Landfill Solvent Screen in solid waste
- **EPA 8240 PCB** – Polychlorinated Biphenyls
- **PAH** – Polycyclic Aromatic Hydrocarbons
- **EOX** – Extractable Halogenated Organic Compounds
- **VOC** – Volatile Organic Compounds (TCLP)
- **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

Class II Landfill Disposal Criteria

The following lists of common compounds are found in Table 2 of the *Alberta Users Guide for Waste Managers* (AEP, August 1996). The associated regulatory levels are the maximum allowable concentrations.

Constituents	Regulatory Limit
BTEX:	
Benzene	0.5 mg/L
Toluene	0.5 mg/L
Ethylbenzene	0.5 mg/L
Xylenes	0.5 mg/L

Constituents	Regulatory Limit
Leachable Metals:	
Antimony	500.0 mg/L
Arsenic	5.0 mg/L
Barium	100.0 mg/L
Beryllium	5.0 mg/L
Boron	500.0 mg/L
Cadmium	1.0 mg/L
Chromium	5.0 mg/L
Cobalt	100.0 mg/L
Copper	100.0 mg/L
Iron	1,000.0 mg/L
Lead	5.0 mg/L
Mercury	0.2 mg/L
Nickel	5.0 mg/L
Selenium	1.0 mg/L
Silver	5.0 mg/L
Thallium	5.0 mg/L
Uranium	2.0 mg/L
Vanadium	100.0 mg/L
Zinc	500.0 mg/L
Zirconium	500.0 mg/L

Others:

All waste must meet all the following requirements:

- $2.0 \leq \text{pH} \leq 12.5$
- **Flash Point** > 60.5 °C
- **No Free Liquids**
- **PCB** 50.0mg/kg

Note(s):

- Not every regulated compound is listed above. Please refer to the **Alberta Users Guide for Waste Managers** (AEP, 1996) for the complete list.
- Waste containing elemental Sulphur and Sulphides ≥ 500.0 mg/kg is deemed Sulphur Waste (S-Waste). Refer to the Guidelines for Landfill Disposal of Sulphur Waste and Remediation of Sulphur Containing Soils (AEP, 2011).