

Calgary Aggregate Soil Reuse Facility Material Acceptance Protocol

Accepted Material Streams

The following material can be accepted at the facility, provided it meets the criteria listed below:

- Soil & Contaminated Soils from:
 - construction and demolition sites,
 - municipal land use zones classified as commercial and light industrial,
 - soils from sand and gravel pit operations,
- Non-hazardous hydrovac material
- Aggregate
- Asphalt

Prohibited Material Streams

- Hazardous waste as specified in the Waste Control Regulation, AR 192/96, as amended
- Dangerous oilfield waste
- Municipal solid waste
- Domestic wastewater
- Explosive (s)
- NORM waste (Naturally occurring radioactive material)
- Biomedical waste; and
- Ozone depleting substances

Acceptance Criteria

All Contaminated Material must have analytical data provided with application.

- Analytical data provided must:
 - Support the non-hazardous solid waste classification
 - Be current (not older than one (1) calendar year)

Required Analysis

- Alberta Class II Landfill Package (Including Flashpoint, Paint Filter, pH, Leachable BTEX, and Leachable Metals)

or the following parameters:

- BTEX F1 - F4
- Alberta Tier 1 Metals
- Salinity
- Alberta Tier 1 PAH's

Analytical limits will be reviewed per application to determine if material meets criteria for processing. If you do not have the required analysis, please contact CAR to discuss.

Additional parameters may be requested at the discretion of the Calgary Aggregate (CAR) dependent on initial testing results and/or site history.

Hydrovac Slurry Acceptance

At our facility, material acceptance is based on the information provided by the hauler or client. This process relies on accurate disclosure, transparency, and open communication to ensure all incoming material meets **non-hazardous criteria under Alberta regulations**. The **non-hazardous classification** is critical, and we conduct random spot checks of loads onsite to help verify the material we receive.

Material is classified as contaminated if it **exceeds the Alberta Tier 1 Soil and Groundwater Remediation Guidelines** (Table 1). If analytical results are not available, a material/job profile must be provided to assess whether the load meets our acceptance criteria.

Drilling Mud & Hydrovac Recycling

Our facility is unique in that we recycle hydrovac slurry into reusable sand and aggregate, rather than sending it straight to landfill. Because of this, the material we accept must be suitable for our wash system **and** meet Alberta's non-hazardous criteria.

Drilling mud (including bentonite-based slurries) often creates challenges:

- It can bind fines and disrupt separation in the plant.
- It may contain chemical additives beyond bentonite (e.g., polymers, lubricants).

For these reasons, **drilling mud is classified as contaminated** at our facility and is charged at a premium rate over clean slurry.

We rely on **transparency and trust** with our haulers — if the material originates from drilling activities, please disclose this up front so we can properly assess and avoid delays at the scale.

Likely Contaminated Hydrovac Sources

These locations often have hydrocarbons, metals, or other contaminants in the soil/slurry:

- **Car wash sumps** – high chance of petroleum hydrocarbons, detergents, heavy metals from brake dust.
- **Mechanical bays & maintenance shops** – oils, grease, solvents, antifreeze.
- **Transformer pads / electrical substations** – possible PCBs, oils.
- **Gas station sites** – fuel hydrocarbons, benzene, toluene, etc.
- **Industrial sites** – manufacturing residue, metal shavings, chemical spills.
- **Old rail yards or siding areas** – petroleum hydrocarbons, creosote, heavy metals.
- **Snow dump sites** – road salts, hydrocarbons from road runoff.
- **Stormwater outfalls or sumps near busy roads** – hydrocarbons, metals from brake/tire wear.
- **Airport or railyard projects** – fuel, deicing chemicals, heavy metals.
- **Any form of drilling mud** – Bentonite and other clay mixes

Generally Clean Hydrovac Sources

These locations typically have minimal contamination risk, assuming no other nearby sources:

- **Residential trenching** (service line installs, landscaping).
- **New subdivision utility installs** – clean fill, recent development.
- **Agricultural fields** (away from chemical/fuel storage).
- **Greenfield construction sites** (undeveloped land).
- **Parks or green spaces** (away from roads and industrial activity).
- **Rural roadway ditching** (light traffic, no nearby industry).

Contact & General Information

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All materials accepted at CAR are managed in accordance with the Environmental Protection and Enhancement Act, the Waste Control Regulation (AR 192/1996), Approval No. 476084-00-00, issued by Alberta Environment and Protected Areas (AEP) for the operation of a soil reuse and recycling facility