

Landfill, Old Mine SOP

1 Purpose and Scope

Red Dog's Old Mine Landfill is used primarily for incinerator ash, but is also permitted for the disposal of inert wastes, such as construction and demolition debris, scrap metal, tires and vehicles. The procedures described below are operational controls designed to minimize any impact on the environment and to comply with Solid Waste Disposal Permit No. 0032-BA003, Teck Cominco Alaska policies and all applicable regulations.

2 Procedure

The following procedures must be followed to operate the landfill in accordance with permit stipulations, Teck Cominco Alaska policies and state and federal regulations.

2.1 Signage

Surface Crew will ensure a sign(s) with the following information is maintained at the entrance to the site:

- Facility Identification
- Owner/Operator Name
- Conditions for Use
- Prohibited Wastes
- Emergency Phone Numbers.

2.2 Access

Non-Surface Crew personnel are not permitted to use the landfill unless prior authorization has been obtained from Surface Crew.

2.3 Landfill Construction

Surface Crew shall ensure the landfill is constructed to accommodate all waste within the ultimate footprint of the landfill (as submitted with the permit application) and to facilitate closure.

2.4 Litter Control

Loose trash that could become windblown shall be bagged by the generator. Surface Crew will not accept dumpsters containing loose trash.

Surface Crew will collect windblown litter from within the disposal site and along the entrance road and return it to the active disposal area.

Surface Crew will collect litter within 500 feet of the site as often as required to prevent it from becoming an aesthetic nuisance.

2.5 Animal Control

To prevent attracting wildlife, putrescible wastes are incinerated and are not permitted in the landfill.

Surface Crew will construct and maintain the landfill to allow construction of a fence if necessary to control wildlife access.

2.6 Prohibitions

The following wastes are prohibited from the landfill. *Disposal of prohibited wastes or prohibited activity shall be reported to [Environmental](#).* Surface Crew will not accept dumpsters containing any of these wastes:

- Unsterilized medical waste
- Food - including food wrappers/containers
- Loose trash - all loose trash to be bagged
- Office / PAC waste
- Oily wastes
- Used oil
- Batteries - except alkaline
- Hazardous wastes
- Liquids
- Greases
- Paints
- Transformer oil
- PCBs
- Sludge
- Chemical wastes
- Explosives
- Radioactive wastes
- Contaminated soil – unless approved by Environmental
- Animal carcasses and animal by-products
- Asbestos

The discharge of firearms is prohibited at the facility.

2.7 Allowed Wastes

Wastes that can be landfilled include the following. Refer to the [Waste Information System](#) or contact [Environmental](#) for information on other wastes or if uncertain about disposal methods:

- Incinerator ash / incinerator wastes – no more than 1 ton per day
- Wood / wood pallets – unrecyclable
- Oil filters – gravity hot-drained & crushed
- Cardboard / paper – unrecyclable
- Scrap metal – unrecyclable
- Aerosol cans – punctured and drained using an approved puncturing unit
- Alkaline batteries
- Construction/demolition waste – contact Environmental for guidance

- Tires – nonsalvageable (these must be placed in an area separate from other wastes)
- Drums – nonrefundable, “empty” and crushed
- White Goods – CFCs (refrigerant) and doors removed from refrigerators/freezers
- Vehicles and Equipment – drained of fluids and petroleum products and with batteries removed

2.8 Burial

The Surface Crew shall be responsible for the compaction and covering of waste:

- Cover with a minimum of 6 inches of compacted soil weekly or more frequently to prevent windblown litter;
- Consolidate and compact covered wastes with a loader bucket or tires. Waste lifts before compaction should not exceed two feet in depth;
- Ensure the working face does not exceed 40 feet wide by 5 feet high;
- Keep the working face as small as practical to prevent windblown litter;
- Apply at least 12 inches of soil cover to areas of the landfill that will be inactive for more than 90 days. The intermediate cover must be applied within 7 days after the last waste is deposited in the inactive area, and graded to prevent water from ponding.
- Ensure that a 10-foot separation is maintained between the bottom of the waste disposal trench and the high groundwater level or at least 2 feet above the natural ground surface.

The Surface Crew will ensure a distance of 50 feet is maintained between the disposal area and any surface water drainage feature (e.g. swales, seasonal ponds) and/or the boundary of the facility.

Mine Operations will deliver soil used for cover when requested by the Surface Crew Supervisor.

2.9 Surface Water

The Surface Crew shall ensure surface water runoff does not flow over, into or through uncovered or covered wastes by constructing and maintaining diversion structures (e.g. ditches or berms).

The Surface Crew shall ensure that solid wastes are not placed in surface waters and that any ponded water within the landfill is removed within 30 days of accumulation.

2.10 Snow Removal

Surface Crew shall remove snow where possible from the disposal area prior to spring snowmelt.

Surface Crew shall deposit any snow removed away from the landfill working face, within the landfill, and clean up any accumulated litter in that area after the snow melts.

Surface Crew shall erect snow fences or berms, as necessary, to control drifting snow at the site.

2.11 Fires

Open burning on the working face of the Old Mine Landfill is prohibited. If a fire is observed:

- Call the Mill Control Room on Channel 2 or at extension 911 to report fires;
- The Fire Department shall extinguish the fire immediately;
- The Fire Department or Loss Control shall notify Environmental immediately of the fire;
- Environmental will notify the Department of Environmental Conservation (ADEC), Division of Environmental Health, Fairbanks office, at 907-451-2108.

2.12 Open Burning

Open burning is permitted at the Old Mine Landfill under Solid Waste Disposal Permit No. 9832-BA005. In order to comply with the both the solid waste disposal permit and Red Dog's Air Quality Permit to Operate 9332-AA003, open burning may only be performed under the following conditions:

- Do not burn items that generate black smoke, such as tires or plastics.
- Only clean lumber and cardboard may be open burned in quantities not to exceed 500 pounds per day and 1,500 pounds per week.
- Ensure material to be burned is kept dry.
- Ensure non-combustibles are separated from combustibles to the greatest extent possible.
- Ensure that a natural or artificial draft is present before ignition.
- Ensure burning takes place away from grass or peat.
- Burning must be performed such that no smoldering occurs.
- Ensure open burn areas are at least 100 feet from the working face.
- Burning must take place in a burn box, burn cage, or other means of containment.
- An attendant must be present when open burning is conducted.
- Open burning is prohibited if ADEC declares air quality advisory for the day.
- Surface Crew must keep records to demonstrate compliance with open burning conditions (use the form [Monthly Open Burning Quantities Form](#)). Provide the Environmental Department with copies of the forms on a monthly basis.

2.13 Inspections

Surface Crew will conduct daily dumpster inspections to ensure proper waste disposal procedures are being followed; inspect the landfill daily to ensure proper operation of the landfill; and conduct weekly inspections for litter and signs of damage from settlement, ponding, leakage or erosion.

For non-Surface Crew personnel, Surface Crew will inspect the load to be dumped, or take other appropriate measures, to ensure Teck Cominco Alaska policies and regulatory requirements are being followed.

Environmental will conduct monthly visual inspections for litter and signs of damage from settlement, ponding, leakage, erosion or operations at the site, signs of combustion or fire in the waste and signs of death or stress to wildlife or vegetation that might be caused by the landfill. Inspections will be conducted using the [Landfill Inspection Form](#).

Actions shall be taken to correct deficiencies identified during any of the inspections. When necessary, the Red Dog EMS corrective action program will be implemented.

2.14 Closure

Mine Operations shall notify Environmental of planned closure at least 60 days before closure date.

Environmental shall notify ADEC at least 30 days before the site is to be permanently closed and equipment withdrawn.

Environmental shall work with Surface Crew and Mine Operations to ensure that all the requirements for closure and restoration of the landfill outlined in Section V of Solid Waste Disposal Permit No. 0032-BA003 and [Closure Plan - Old Mine Landfill](#) are met.

2.15 Permit Administration

Environmental shall be responsible for permit maintenance.

Environmental shall ensure that applications for renewal or amendment of the Permit are made no later than 30 days before the expiration date of the permit or planned effective date of the amendment.

2.16 Records and Reporting

Environmental shall maintain the landfill operating records, which will include copies of the permit and permit application, operating plans (SOPs), inspection records (for 5 years), staff training procedures, analytical data, financial assurance, annual site development and use plans (as-builts), and photographs.

Mine Operations shall submit to Environmental an updated plan showing the current status of the landfill and plans for future development by May 1st of every year.

Environmental shall submit an updated copy of the site development and use plans to ADEC before the permit anniversary date each year.

Environmental shall photograph the disposal site as prepared for waste disposal and during waste deposition at least once per year.

Environmental will sample water found leaching from the landfill to determine the quality and source, and notify ADEC within 48 hours of any known monitoring data that indicates contamination from the landfill. Environmental will follow up with a written notice to ADEC regarding the contamination within two weeks of discovery.

3 Key Responsibilities

Operating Superintendent: Responsible for ensuring responsibilities of Mine Operations personnel are carried out according to this SOP.

Surface Crew Supervisor: Overall responsibility and accountability for the operation of the landfill.

Environmental Manager: Overall responsibility for ensuring permit stipulations and regulations are adequately communicated to Operations.

Environmental Coordinator: Responsible for initiating corrective action when necessary, preparing applications for permit renewal or amendment, submitting annual reports and communicating permit or regulatory changes to Operations.

Environmental Technical Supervisor: Responsible for ensuring monthly inspections are conducted.

Environmental Technician: Responsible for conducting monthly inspections.

4 Departure from Procedure

This SOP was written to comply with applicable laws and regulations pertaining to the disposal of solid waste. Failure to follow this procedure could result in possible consequences to health and safety and/or the environment. Departure from procedures resulting in pollution may also lead to criminal or civil penalties for you and the Teck Cominco Alaska as well as adverse affects on corporate performance and reputation.

5 Definitions

Putrescible: organic material that will decompose producing foul-smelling matter (e.g., food, animal carcass, medical waste)

6 General Requirements

ADEC Solid Waste Disposal Permit #9832-BA005

Air Quality Permit to Operate #9332-AA003

18 AAC 60 – Alaska State Solid Waste Management Regulations

7 Key Documents/Tools/References

[Landfill Inspection Form](#)

[Closure Plan - Old Mine Landfill](#)

[Monthly Open Burning Quantities Form](#)