

# Landfill Operations Plan

## General

This fact sheet provides information required for the Ministry of Environment (the ministry) to expedite the approval process for operating a landfill. A person that intends to operate a landfill must apply for a permit from the Minister authorizing that person to operate the landfill. Owners/operators should contact their assigned environmental project officer for the application process and to obtain approval.

Landfill owners may follow the landfill operation best practices or best practices of a similar jurisdiction.

## Application

Unless already submitted in the application to establish, upon receipt of landfill construction verification, owners have 90 days to submit the application to operate through their assigned environmental project officer in order to receive a permit to operate. The application should include the following information as appendices:

**A. Operating plan** – The operating plan should include the details of the operating process as outlined by relevant best management practices, generally including but not limited to:

- procedures for minimizing nuisance
- procedures for preventing scavenging
- procedures for minimizing disease vectors
- procedures for waste inspection, screening, handling, and measures for preventing and managing violation of the waste acceptance criteria
- a manifest for waste movement
- procedures for handling, storage and management of temporarily stored waste
- procedures for disposing of special waste such as friable waste asbestos
- procedures for cover of exposed waste
- an emergency response plan
- the procedures for preventing wildlife, vermin and feral animals
- an Animal Management Plan should be included for large predatory animals
- procedures for staff training of site operations, equipment and safety

**Note:** Procedures for controlled burning will be site-specific and captured in the permit. Specific waste acceptance depends on the site characterization and design plan and is regulated by the respective regulations for municipal and industrial landfills. As such, the waste accepted will be site-specific and captured in the permit.

If an owner wishes to accept and not treat hydrocarbon-impacted soil, the soil concentrations must meet the requirements as determined by the ministry and meet the criteria for future land use. If an owner wishes to treat hydrocarbon-impacted soil, a separate industrial works application and permit are required.

**B. Environmental protection** – Environmental protection may be a separated document or integrated into the operations plan. Best management practices for environmental monitoring should be followed but may generally include:

- procedures for waste placement, seepage control, and leachate management
- air quality, surface water, and groundwater management plans

## Required Record Keeping

Every owner should ensure that the records are kept and retained for the operational life of the landfill as determined by the site-specific permit. The following are general record keeping requirements:

- a description for each waste type received
- records of any environmental sampling, analysis or monitoring
- any certificate received from a person qualified as agreed to by the ministry
- updates to the site plan such as changes to the compliance boundary and the existing waste foot print
- updates to estimated tonnes per year received, estimates of the population served, and the number of years the landfill has been in operation

**Note:** Every owner of a landfill should ensure that the records are made available to the Minister on request and that if ownership changes, the records are transferred to the new owner. Also, landfill closure application procedures will be included in the site-specific operating permit.

## Operation and Environmental Monitoring Duties

Owners have a duty to carry out the operation and environmental protection activities according to the operation plan.

**Environment** – includes the following:

- air and the layers of the atmosphere
- Land, including soil, subsoil, sediments, consolidated surficial deposits and rock;
- water;
- organic and inorganic matter and living organisms;
- interacting natural systems and ecological and climatic interrelationships that include the components listed above.

**Environmental Protection** – methods to be used to prevent, minimize, monitor, mitigate, remedy, or reclaim an adverse effect before, during or after any activity.

**Operating phase** – the period of operation during which waste is received for disposal at the landfill or received for storage at the transfer station.

**Operation Plan** – a written document that describes general instructions for the management and operations of a landfill.

**Special waste** –

- waste containing naturally occurring radioactive material or technologically enhanced naturally occurring radioactive material;
- animal or animal carcass waste that may contain one or more reportable diseases listed in the *Reportable Diseases Regulations* (Canada);
- emergency livestock mortalities as identified by the Ministry of Agriculture;

- waste asbestos;
- any other material or substance that may require special handling due to the potential adverse effects from disposal, as identified by the Minister.

**Type I waste** – Mixed waste stream generated from household and non-hazardous commercial and institutional sources and does not include type II waste.

**Type II waste** –

- industrial waste;
- categories of waste as defined by the ministry;
- a waste stream that has consistent and predictable composition and properties and that exhibit one or more of the following characteristics:
  - the waste stream is readily putrescible or exhibits a five-day biochemical oxygen demand (BOD5) of greater than 100,000 milligrams per kilogram and exceeds 10 per cent of the landfill's average daily waste receiving quantity, expressed in consistent units of either mass or volume;
  - the waste stream contains one or more water soluble inorganic salts that, if disposed of in the landfill at an uncontrolled rate:
    - could render the leachate unacceptable for off-site treatment or disposal;
    - where leachate recirculation is practiced, would increase the salinity of the leachate so as to terminate or severely reduce the

- biologically mediated stabilization of the landfill's contents.
- the waste stream contains uncharacterized sludge, slurries or filter cakes produced as byproducts of the metal finishing industry.

**Hazardous waste (or waste dangerous good)** – a substance with the characteristics described in subsection 4(4) of [The Hazardous Substances and Waste Dangerous Goods Regulations](#).

**Industrial waste** – any waste that:

- is generated by any process of industry, manufacturing, trade or business or by the development of a natural resource;
- Includes seepage, rainwater or storm water that enters industrial waste works.

**Contaminating lifespan** – the period during which waste in the landfill is expected to be generating substances that may cause or are causing an adverse effect.

**Environmentally impacted site** – an area of land or water that contains a substance that may cause or is causing an adverse effect.

**Existing waste footprint** – the area or cell within the compliance boundary of a landfill where waste has been disposed of in the past in accordance with the estimated or designed waste disposal capacity of the landfill.

## Contact and References

Saskatchewan Ministry of Environment  
Tel: 1-800-567-4224 (toll free in North America)  
or 306-787-2584  
Web: [www.environment.gov.sk.ca](http://www.environment.gov.sk.ca)  
E-mail: [Centre.Inquiry@gov.sk.ca](mailto:Centre.Inquiry@gov.sk.ca)

Questions about hazardous waste refer to: [Hazardous Substances and Waste Dangerous Goods Regulations](#). Web: <http://www.qp.gov.sk.ca/documents/English/Regulations/Regulations/E10-2R3.pdf>