

Ministry of Environment
Environmental Protection Branch

SWRC
Composting Regulations in Saskatchewan

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Composting Guidance and Standards

- The Saskatchewan Ministry of Environment does not currently have guidance or standards specific to composting operations in place
- A results based regulatory model is in place which allows greater flexibility around the design and operation of industrial facilities in the province.
 - If available, guidance and standards from other jurisdictions can be adopted for use in Saskatchewan
 - A “qualified person” is responsible for ensuring that the design meets best management practices
- The possibility of a Environmental Code Chapter for composting facilities is currently being investigated by the Ministry of Environment
- In absence of guidance/standards it is expected proponents will follow an approved best management practice

Alberta Compost Standards

- Composting: a managed process of bio-oxidation of a solid heterogeneous organic substrate including a thermophilic phase
- Class I
 - Accept more than 20,000 tonnes of feedstock per year for composting
 - Large facilities would have operation specific permit requirements
- Class II
 - Accept 500-20,000 tonnes of feedstock per year for composting
- Class II
 - Accept 100-500 tonnes of leaf and yard waste feedstock per year
- Standards do not apply if accepting less than 100 tonnes/yr of leaf and yard waste or to residential composters

Alberta Compost Standards (con't)

- Feedstock: all materials that are accepted at the composting facility and used in the composting process, including amendments and bulking agents (Standards for Composting Facilities in Alberta, 2007)
 - Examples include:
 - Leaf and yard waste
 - Animal bedding
 - Food waste
 - Paper/cardboard products
 - Hatchery waste
 - Manure
- Leaf and yard waste: vegetative matter resulting from gardening, horticulture, agriculture, landscaping or land clearing operation, including materials such as tree and shrub trimmings, plant remains, grass clippings, leaves, trees and stumps (Standards for Composting Facilities in Alberta, 2007)

What Regulations Apply to Composting and Composting Facilities?

- The Municipal Refuse Management Regulations, 1986 (Provincial)
- Environmental Management and Protection Act, 2010 (Provincial)
- CCME Guidelines to Compost Quality, 2005 (Federal)
- Fertilizer Act and Regulations, 1985 (Federal)
- Local bylaws/zoning (Municipal)

Existing WDG Facilities

- Both waste disposal grounds and transfer station facilities may have composting operations if:
 - It is included in an operations plan approved by the ministry
 - The composting takes place on the property in which the WDG/TS permit is issued
 - The operation follows recognized best management practice (ie: Alberta standards)
 - There are no other environmental or compliance concerns

What do I need to do to start composting?

If you are a municipality who wishes to start composting at their existing permitted WDG/TS

1. Contact your Environmental Protection Officer
2. Complete the Environmental Assessment Self Assessment Checklist
3. Submit a design and operations plan for approval
4. Carry out the work as outlined in the Permit to Construct
5. Submit any documentation as required in the construction permit and apply to operate
6. Operate the facility as per the Operations Plan

What do I need to do to start composting?

If you are a municipality who wishes to start composting at new facility

1. Contact your Environmental Protection Officer
2. Complete the Environmental Assessment Self Assessment Checklist
3. **Submit a site suitability report for approval**
4. Submit a design and operations plan for approval
5. Carry out the work as outlined in the Permit to Construct
6. Submit a request for a Permit to Operation along with any other documentation required in the construction permit (closure plan, operations plan, emergency response plan)
7. Operate the facility as per the Permit to Operate and Operations Plan

What do I need to do to start composting?

If you are a private business or organization who wishes to start composting at new facility

1. Contact the Ministry of Environment Client Service Office to be put in touch with an Environmental Protection Officer
2. Complete the Environmental Assessment Self Assessment Checklist
3. Submit a site suitability report for approval
4. Submit a design and operations plan and decommissioning and reclamation plan for approval
5. Provide the ministry with a financial assurance based on the cost estimates in the D&R plan
6. Carry out the work as outlined in the Permit to Construct
7. Submit a request for a Permit to Operate along with the Operations Plan, Emergency Response Plan, Decommissioning and Reclamation Plan
8. Operate the facility as per the Permit to Operate and Operations Plan

Site Suitability Report

The site suitability report should describe the site information to determine the specific design requirements and protect the environment for the chosen location.

The report should include:

- a) A site plan that details the topography and surface water hydrology within 500 meters of the proposed site.
- b) A document describing the geological and hydrogeological conditions.
 - ie: a technical report
- c) Identify the location and the relationship with host site and surrounding community.

Design Plan

The report should be prepared by a person who possesses the core skills and competencies to design a compost facility and include a design that meets the applicable best practices and should:

a) Include a site plan showing:

- legal site boundary
- geographical location of site access, roads, earth works, buildings, buffer zones, and infrastructure
- hydrologic information, land use and other environmental information
- areas designated for different composting areas (receiving, feedstock storage, active composting, curing etc.)

b) Include details concerning:

- Accepted feedstock types and quantities
- Composting method and applicable design components (liners, working surfaces, structures, facilities etc.)
- Odour management

Design Plan (con't)

- c) Incorporate environmental protection and control systems
 - Run-on control systems
 - Run-off control systems
 - Groundwater monitoring

- d) Process water control systems

Operations Plan

The operations plan can be seen as the instruction manual on how to run the site. Information may include at a minimum:

- What type/amount of feedstock is be accepted and how is it being documented?
- Prohibited waste handling procedure and process waste procedures
- Site security, signage
- Monitoring and maintenance programs for liners, working surfaces etc.
- Description of the composting process and plan
 - How is the feedstock processed?
 - Pathogen reduction
 - Composting temperature
 - QA/QC
 - Quality monitoring

Operations Plan (con't)

- Odour management
- Nuisance management (litter, dust, weeds etc.)
- Environmental monitoring program
- Is training or certification required?
- In the event of complaints from the public how does the facility plan to manage them
- Site safety and emergency response plan
- Record keeping and reporting

Finished Compost Requirements

Processed compost that is sold or given away is required to follow:

- CCME Guidelines for Compost Quality

These compost guidelines are based on the following four criteria for product safety:

- foreign matter
 - maturity
 - pathogens
 - trace elements.
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- The Fertilizer Act and Regulations

Questions?

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