

# Ministry of Environment Environmental Protection Branch

## Compost Guidance

Saskatchewan Waste Reduction Council

June 2022

# Composting Guidance and Standards

- Composting: aerobic biological decomposition of the organic matter
- A results-based regulatory model is in place in Saskatchewan, allowing for 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 the design meets best management practices
- An Environmental Code Chapter for composting facilities is currently being developed by the Ministry of Environment
- In the absence of guidance/standards, proponents are expected to follow an approved best management practice

# Composting Guidance Document

- Approved in May 2020
- Presents a broad overview of what is needed to establish and operate a composting facility
- Generally follows the Standards for Composting Facilities in Alberta
- Any facility with more than 2000 kg of active composting material needs a permit
- Will be replaced by the composting code chapter

<https://pubsaskdev.blob.core.windows.net/pubask-prod/117826/Saskatchewan%252BCompost%252BGuidance%252BDoc%252BMay%252B2020.pdf>

# Feedstock

- Feedstock: all materials that are accepted at the composting facility and used in the composting process, including amendments and bulking agents
  - Examples include:
    - Leaf and yard waste
    - Animal bedding
    - Food waste
    - Paper/cardboard products
    - Hatchery waste
    - Manure
- Leaf and yard waste: means plant matter resulting from gardening, horticulture, agriculture, landscaping, or land clearing operations, and includes tree and shrub trimmings, tree roots, plant remains, grass clippings, leaves, trees, and stumps (Code of Practice for Compost Facilities, Alberta, 2022)

# 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 (i.e. Alberta standards)
  - There are no other environmental or compliance concerns

# What do I need to do to start composting?

**If you are a municipality wanting to start composting at your existing permitted WDG/TS:**

1. Contact an Environmental Protection Officer at 1-800-567-4224
2. Depending on the type of operations, your municipality may need to:
  - Complete the Environmental Assessment Self Assessment Checklist
  - Submit a design and operations plan for approval
  - Carry out the work as outlined in the Permit to Construct
  - Submit any documentation as required in the construction permit and apply to operate
3. The operating approval will be amended to include the composting operation and any additional monitoring required
4. The facility will need to update its operations plan to include composting

# What do I need to do to start composting?

**If you are a municipality wanting to start composting at a new facility:**

1. Contact an Environmental Protection Officer at 1-800-567-4224
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 wanting to start composting at a new facility:**

1. Contact the Ministry of Environment Client Service Office to be put in touch with an Environmental Protection Officer at 1-800-567-4224
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 (D&R) 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 site information to determine the specific design requirements, and measures to 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.
  - i.e. a technical report
- c) The location and relationship with the 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 applicable best practices. It should:

a) Include a site plan showing:

- Legal site boundary
- Geographic 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.)

# Design Plan

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

Once the construction is complete, the owner must provide the ministry with a letter verifying the design was carried out in accordance with the approved design

# 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 being 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

- 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
- *The Fertilizer Act and Regulations*

# Code Chapter for Compost Facilities

- Public consultation tentatively scheduled for late summer or early fall
- Developed in Saskatchewan
- Will reduce red tape and the time that municipalities spend on permitting and reporting while providing flexibility for a results based solution



# Questions?

[saskatchewan.ca](http://saskatchewan.ca)