

Regulatory Summary

Permitted Organic Materials Composting Facilities

Iowa Administrative Code 567 Chapter 105

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Exemptions from Permit

The following facilities are exempt from obtaining a permit:

1. Yard waste or household organic waste composted and used on the same premises where originated.
2. Composting facilities involving agricultural waste, excluding dead animals.
3. Clean wood waste free of coatings and preservatives necessary as bulking agent. Any other bulking agent requires approval from Iowa Department of Natural Resources (DNR).
4. Yard waste, household organic waste, and agricultural waste generated, composted together in any combination, and used on the same premises where it originated.
5. Facilities composting yard and/or organic waste from off premises that are less than 2 tons per week.

General Requirements for All Composting Facilities Not Exempt

The composting facility must be located:

1. 500 feet from any existing residence (not including owner/operator residence)
2. Outside of wetlands
3. 200 feet from public wells and 100 feet from private wells
4. 50 feet from property lines
5. 100 feet from streams, lakes or ponds
6. If inside the 100-year floodplain, other regulations apply (567-71.5 (455B))

The following management practices must be followed:

1. Leachate must be minimized.
2. Water must be prevented from running onto the facility from adjacent land to prevent compost leachate and runoff from leaving the composting facility.
3. Runoff must be properly managed.
4. Facility must be designed, constructed, and maintained to minimize ponding of water or liquids.
5. Any ponding of liquids must be corrected within 48 hours after the termination of the event causing ponding.
6. Composting must be done on an all-weather surface to prevent groundwater and surface water contamination but to also allow for access during inclement weather. Examples of all-weather surfaces includes the following:
 - Compacted soil
 - Compacted granular aggregates
 - Asphalt
 - Concrete
7. Solid waste that cannot be composted must be properly disposed.
8. Infectious waste such as contaminated sharps, cultures, blood or blood products, pathological waste, or contaminated animal carcasses from hospitals / research labs cannot be accepted for composting unless approved by the Iowa DNR.
9. Nuisance laws must be followed to reduce odors, dust, noise, litter or public health hazards (Iowa Administrative Code Chapter 657).
10. The sale of compost as a soil conditioner or fertilizer must be registered by the Department of Agriculture and Land Stewardship under Iowa Administrative Code Chapter 200.
11. Contamination must be less than 1.5% by dry weight and less than 13mm in size. Examples of contamination includes glass, metal, and plastic.

Permit Application Requirements

A permit application for a new facility will need to include a completed Form 50A found at <http://www.iowadnr.gov/portals/idnr/uploads/forms/5421602.pdf>.

The permit application must include the following:

1. A map or aerial photograph that contains the following:
 - Boundaries of the facility
 - Wells, streams, creeks, rivers, ponds, sinkholes and drainage wells
 - North and other compass points
 - Zoning and land use within one-half mile
 - Haul routes to and from the facility with load limits and other restrictions
 - Homes and buildings within one-half mile
 - Section lines or other legal boundaries
 - Any nearby runway
2. Design requirements of the facility must be prepared by an Iowa-licensed professional engineer and include the following:
 - Equipment to be installed
 - Litter control devices
 - Pollution control devices
 - Fire control devices
 - Landscaping
 - Gates
 - Personnel and maintenance facilities
 - Sewer and water lines
 - Process water
 - Dimensions, details, capacities of proposed receiving, processing, production, curing, and storage areas
 - Design calculation justifying size of composting areas
 - Descriptions, specifications and capacities of proposed equipment to be used in composting
 - Flow diagram of all operating steps
 - Composition of the operating surface (receiving, processing, production, and curing must take place on a constructed impervious base that can support the load of the equipment used in all weather conditions)
 - Storage areas for finished compost must be accessible during inclement weather
 - The facility may need a stormwater permit
 - Proof of the applicant's ownership of the site and legal entitlement to use the site as a composting facility
3. Operating plan requirements must include the following:
 - Method of composting
 - Duration of composting with a time frame for receiving, processing, production, curing and storage
 - Description of storage of raw materials including quantity and types
 - Description of types, amounts and sources of wastes to be received and processed daily and description of service area where sources are located
 - Description of aeration method and frequency to maintain aerobic conditions
 - Description of methods to minimize / manage odors, dust, vectors, noise and litter

- Description of specific procedures to be followed in case of equipment breakdown, maintenance downtime and fire in equipment, composting material or buildings.
- Plans for using or marketing finished compost
- Methods of disposing of collected stormwater
- Method of maintaining stormwater management systems to maintain design volume and to locate and repair leaks
- Description of the monitoring, sampling, and analysis procedures and schedule for testing the composting process and product including sampling frequency, sample size and number, and sample locations.
- A facility-specific time-temperature monitoring plan for pathogen kill

Operating Requirements

1. Access to the facility
 - Access to the facility must be restricted with lockable gate at the entrance.
 - Access to the facility shall be allowed only when an employee, agent or representative of the facility is on duty.
 - Emergency access must be provided and fire lanes maintained as required by the local fire department.
2. Permanent signage of the facility must be posted at the entrance and include the following information:
 - Name of operation
 - Operation hours
 - Materials which are accepted or the statement, “All materials must have prior approval.”
 - Telephone number of 24-hour emergency contact person
3. All materials received must be incorporated into the composting process within 24 hours of receipt unless otherwise proposed in the operating plan and authorized in the permit.
4. Testing requirements include the following:
 - The permit holder must test at a minimum of twice weekly temperature readings of compost piles, batches and windrows.
 - Compost must be held at a temperature above 131 degrees Fahrenheit for an appropriate amount of time to achieve pathogen reduction.
 - Weekly tests of moisture level of compost piles, batches and windrows.
 - Finished product must be tested and not applied to land, sold or given away for household use unless requirements are met for fecal coliform density, salmonella bacteria, contaminants (glass, metal, plastic), and concentrations of metals.
5. The operator of the composting facility must be certified by an Iowa DNR approved program and renewed every 3 years.

Recordkeeping Requirements

1. Records shall be maintained by the facility for three years and located at the facility at all times. These records shall be submitted to the Iowa DNR upon request.
2. Analytical results or testing shall be recorded on an approved reporting form.
3. Records shall be maintained of types and weight of compostable materials and bulking agent, in tons, accepted at the facility annually.

4. Records shall be maintained of weight of compost, in tons, removed from the facility annually.
5. A copy of the plan, the permit, annual reports, and the current storm water pollution prevention plan shall be maintained at the facility.

Reporting Requirements

An annual report for the previous fiscal year beginning July 1 and ending June 30 shall be submitted to the Iowa DNR by July 31 of each year by all permitted solid waste composting facilities. Use Form 542-3276C completing all applicable sections. A copy of the form can be found at the following link under the title *Annual Composting Facility Report (542-8014)* - <http://www.iowadnr.gov/InsideDNR/RegulatoryLand/SolidWaste/SolidWastePermitting/Composting.aspx>

Transfer of Title and Permit

If the title to a solid waste composting facility is transferred, then the Iowa DNR shall transfer the permit within 60 days as long as the following requirements are met:

1. Notify the Iowa DNR within 30 days of transferring the title to request a transfer of the permit.
2. The permitted facility must be in compliance with the rules and conditions of the permit.

Revocation of Permit

If the permit is revoked by the Iowa DNR, then no new permit shall be issued to that agency for the sanitary disposal project for a period of one year from the date of revocation. This rule shall not prohibit the issuance of a permit to another public or private agency.

Inspection Prior to Commencing Operation

1. The Iowa DNR must be notified 30 days prior to completion of a solid waste composting facility and when the construction has been completed.
2. The Iowa DNR shall then complete an inspection of the facility to determine if the project has been constructed in accordance with the plans and specifications and permit requirements.
3. No solid waste shall be accepted by the facility until it has been inspected and approved by the Iowa DNR.
4. The Iowa DNR Solid Waste Composting Inspection Form can be found at <http://www.iowadnr.gov/InsideDNR/RegulatoryLand/SolidWaste/SolidWastePermitting/Composting.aspx>.

Duration of Permits

Solid waste composting facility permits shall be issued for a period of three years and are renewable for similar terms unless otherwise specified.

Permit Renewals

Renewal requests must be in writing and filed at least 90 days before the expiration of the current permit and submitted on Form 50A to the Iowa DNR found at <http://www.iowadnr.gov/Portals/idnr/uploads/forms/5421602.pdf>.

Facility Expansion or Change of Process

Prior to a facility's expanding the amount or types of materials accepted or a change in the process, the facility must make a request in writing to obtain approval from the Iowa DNR for an amendment to the permit.

Closure Requirements

1. A closure plan must be submitted to the Iowa DNR for each composting facility containing a description of the steps necessary to close the facility. A permit will not be issued without a closure plan.
2. An updated closure plan, including a schedule for closure must be submitted to the Iowa DNR within 60 days prior to proposed termination date for the facility.
3. All waste and unfinished and finished compost must be removed from the premises within six months of the facility's ceasing operation unless an alternative schedule is approved by the Iowa DNR.
4. Facilities that are beneficially reusing material in order to comply with closure requirements are required to submit in written form all agreements for reuse including the following:
 - Names of parties involved
 - Amount of material utilized
 - Cost per ton.
5. Upon closure, the following must be completed:
 - Properly dispose of all organic material, solid waste and litter at the premises
 - Lock all doors, gates, entrances and exits
 - Report the completion of these activities to the local political jurisdiction, the Iowa DNR , and the Iowa DNR field office serving the composting facility

Financial Assurance

Permitted solid waste composting facilities receiving more than 5,000 tons of feedstock annually (bulking agent excluded) must obtain and submit a financial assurance instrument to the Iowa DNR for waste materials received and stockpiled by the facility. The financial assurance instrument shall provide monetary funds to properly dispose of any preprocessed and postprocessed stockpiled materials that may remain at the facility due to the owner's or operator's failure to properly close the site within 30 days of permit suspension, termination, revocation or expiration.

1. No permit will be issued or renewed without a financial assurance instrument.
2. Proof of compliance of establishment of financial assurance instrument must include the following:

- Current closure cost estimate submitted to the Iowa DNR within 30 days of the close of the permit holder's first fiscal year that begins after June 19, 2002 or at the time of the application for a permit for a new solid waste composting facility.
 - The owner / operator must provide continuous coverage for closure and submit proof of compliance including an updated closure cost estimate with each permit renewal until the Iowa DNR releases this requirement.
3. Use of one financial assurance instrument for multiple permitted activities may satisfy the requirement if the permit holder ensures the instrument provides financial assurance for an amount equal to the current cost estimate for closure of all sanitary disposal project activities covered.
 4. Estimates of financial assurance amounts must be certified by an Iowa-licensed professional engineer and submitted to the Iowa DNR. Estimates must include the following:
 - Transportation costs of loading the material and total tip fees to properly dispose of the maximum tonnage of received materials that could be managed and stockpiled by the facility.
 - Costs of removing any wastewater held at the facility.
 - Or costs of a beneficial reuse option approved pursuant to the closure requirements, for a total amount of material that could be managed and stockpiled by the composting facility.
 - If the total amount of material will not be beneficially reused, the remainder of the cost must be calculated according to transportation costs listed above or to remove wastewater held at the facility.
 - The cost of maintaining financial assurance
 5. Acceptable financial assurance instruments must be established in an amount equal to the cost estimate outlined above and shall not be cancelled, revoked, disbursed, released, or allowed to terminate without approval from the Iowa DNR. The following forms of financial assurance are approved and acceptable:
 - Secured trust fund
 - Local government dedicated fund
 - Surety bond
 - Letter of credit
 - Corporate guarantee
 - Local government guarantee
 6. Financial assurance cancellation and permit suspension
 - A financial assurance instrument may be terminated by the owner / operator if the owner / operator substitute alternate financial assurance prior to cancellation.
 - A financial assurance instrument must be continuous in nature until cancelled by the financial assurance provider or until the Iowa DNR gives written notification to the owner / operator and financial assurance provider that the covered site has been properly closed.
 - The financial assurance provider must give 90 days notice in writing to the owner operator and the Iowa DNR in the event of intent to cancel the instrument.
 - Within 60 days of receipt of a written notice of cancellation of financial assurance by the financial assurance provider, the owner / operator must provide the Iowa

DNR an alternative financial assurance instrument or the permit will be suspended.

- The owner / operator must perform proper closure within 30 days of the permit suspension.
- If the owner / operator does not properly close the site within the 30 day period allowed, the Iowa DNR shall file a claim with the financial assurance instrument provider to collect the amount of funds necessary to properly close the site.
- An owner or operator who elects to terminate a permitted activity, whose renewal application has been denied, or whose permit has been suspended or revoked for cause must submit within 30 days of the termination of the permit a schedule for completing proper closure of the terminated activity.
- Closure completion cannot exceed 60 days from the date of termination of the permit.
- The Iowa DNR may request payment from any financial assurance provider for the purpose of completing closure when the following circumstances exists:
 - The owner or operator is more than 15 days late in providing a schedule for closure or for meeting any date in the schedule for closure.
 - The owner or operator declares an economic inability to comply with this rule, either by sending written notification to the Iowa DNR or through an action such as, but not limited to, filing for bankruptcy.

Variances

A request for a variance must be submitted in writing to the Iowa DNR pursuant to 561 Chapter 10. The Petition for Waiver or Variance Form 542-0004 can be found at <http://www.iowadnr.gov/portals/idnr/uploads/forms/5420004.pdf>.

This fact sheet has been prepared by the Iowa Waste Reduction Center (IWRC) to assist those interested in permitted solid waste composting facilities in Iowa and in complying with the state regulations. This document is intended solely as guidance and is not a substitute for reading applicable regulations or hiring an Iowa-licensed professional engineer.

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