

567—105.8(455B,455D) Permit application requirements for solid waste composting facilities.

105.8(1) A permit application for a new facility shall include a completed Form 50A (542-1542A) and a map or aerial photograph. This map or aerial photograph shall identify:

- a. The boundaries of the facility.
- b. Wells, streams, creeks, rivers, ponds, sinkholes, and drainage wells.
- c. North or other principal compass points.
- d. Zoning and land use within one-half mile of the closest portion of the facility.
- e. Haul routes to and from the facility with load limits or other restrictions.
- f. Homes and buildings within one-half mile of the closest portion of the facility.
- g. Section lines or other legal boundaries.
- h. Any nearby runway used or planned to be used by turbojet or piston-type aircraft at FAA-certified airports.

105.8(2) Design requirements. Design documents must be prepared by an Iowa-licensed professional engineer (Iowa Code chapter 542B) and must include the following:

a. Equipment to be installed, litter control devices, pollution control devices, fire control devices, landscaping, gates, personnel and maintenance facilities, sewer and water lines, and process water, and dimensions, details, and capacities of the proposed receiving, processing, production, curing, and storage areas.

b. Design calculations justifying the size of the composting areas. The areas for composting must be adequate for the volume of solid waste being composted in accordance with best management practices.

c. Descriptions, specifications, and capacities of proposed equipment to be used in composting.

d. Flow diagram of all operating steps.

e. 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 under all weather conditions. The permeability coefficient of the base must be less than 1×10^{-7} cm/sec (0.00028 feet/day). Storage areas for cured/finished compost must permit accessibility during periods of inclement weather.

f. Dimensions, details, and capacities of storm water run-on and runoff management systems of the composting facility. The facility may need a storm water permit.

g. Proof of the applicant's ownership of the site and legal entitlement to use the site as a composting facility.

105.8(3) The operating plan shall provide the following:

a. Method of composting.

b. Duration of composting with a time frame for receiving, processing, production, curing, and storage.

c. Description of storage of raw materials including quantity and types.

d. Description of the types, amounts, and sources of wastes to be received and processed daily. This description must include a description of service area defined in terms of municipalities wherein sources of the material are located.

e. Description of the aeration method and the aeration frequency to be used to maintain aerobic conditions in accordance with best management practices.

f. Description of the methods to minimize and manage odors, dust, vectors, noise and litter.

g. Description of the specific procedures to be followed in case of equipment breakdown, maintenance downtime, and fire in equipment, composting material or buildings to include methods to be used to remove or dispose of accumulated waste and burned or damaged material.

h. Plans for using or marketing the finished compost.

i. Method(s) of disposing of collected storm water.

j. Method(s) of maintaining storm water management systems to maintain design volume and to locate and repair leaks in the system.

k. 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 shall be included in the operating plan.