

567—101.108(455B) Operating requirements. The requirements of this rule shall be consolidated in a DOPs pursuant to 101.108(4).

101.108(1) Prohibited operations and activities. For the purposes of this subrule, “regulated hazardous waste” means a solid waste that is a hazardous waste as defined in Iowa Code section 455B.411.

a. Waste screening for prohibited materials. Owners or operators of MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes, polychlorinated biphenyls (PCB) wastes, and other prohibited wastes listed in 101.108(1)“b.” This program must include, at a minimum:

(1) Random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous wastes, PCB wastes or other prohibited wastes listed in 101.108(1)“b”;

(2) Records of any inspections;

(3) Training of facility personnel to recognize regulated hazardous wastes, PCB wastes and other prohibited wastes listed in 101.108(1)“b”; and

(4) Notification of the EPA regional administrator if regulated hazardous wastes or PCB wastes are discovered at the facility.

b. Materials prohibited from disposal. The following wastes shall not be accepted for disposal by an MSWLF.

(1) Waste that is a chemical compound specifically listed by U.S. Environmental Protection Agency (EPA) as a regulated hazardous waste or that is a characteristic hazardous waste pursuant to the following characteristics:

1. Ignitable in that the waste has a flash point of less than 140°F.

2. Corrosive in that the waste has a pH less than 2 or greater than 12.5.

3. Reactive in that the waste is normally unstable, reacts violently with water, forms an explosive mixture with water, contains quantities of cyanide or sulfur that could be released into the air in sufficient quantity to be a danger to human health, or can easily be detonated or exploded.

4. Toxicity characteristic leaching procedure (TCLP) (EPA Method 1311) toxic, in that a TCLP listed chemical constituent exceeds the EPA-assigned concentration standard in 40 CFR Part 261 or the department-assigned concentration standard in Table I of 567—101.107(455B). Waste from a residential building that is contaminated by lead-based paint (i.e., the waste fails the TCLP test for lead only) may be disposed of in an MSWLF unit. The purpose of this exclusion is to help prevent the exposure of children to lead-based paint. Therefore, the meaning of “residential building” in regard to this TCLP exclusion shall be interpreted broadly and include any building that children or parents may utilize as a residence (temporarily or permanently). Such residential buildings include but are not limited to single-family homes, apartment buildings, townhomes, condominiums, public housing, military barracks, nursing homes, hotels, motels, bunkhouses, and campground cabins.

(2) Polychlorinated biphenyl (PCB) wastes with a concentration equal to or greater than 50 parts per million (ppm).

(3) Free liquids, liquid waste and containerized liquids. However, free liquids and containerized liquids may be placed in MSWLF units if:

1. The containerized liquid is household waste other than septic waste. The container must be a small container similar in size to that normally found in household waste;

2. The waste is leachate or gas condensate derived from the MSWLF unit, whether it is a new or existing MSWLF unit or lateral expansion, and is designed with a composite liner and leachate collection system as described in 101.107(5)“a.” The owner or operator must demonstrate compliance with this subparagraph and place the demonstration in the operating record; or

3. The MSWLF unit is a RD&D project in which the department has authorized the addition of liquids and meets the applicable requirements of 101.104(2).

(4) Septage, which is the raw material, liquids, and pumpings from a septic system, unless treated pursuant to 567—Chapter 68.

(5) Appliances as defined pursuant to 567—Chapter 102, Division VII, unless there is documentation that the appliance has been demanufactured pursuant to 567—Chapter 102, Division VII.

(6) Radioactive waste, excluding luminous timepieces and other items using very small amounts of tritium.

(7) Infectious waste unless managed and disposed of pursuant to 567—Chapter 102, Division VI.

(8) Hot loads, meaning solid waste that is smoking, smoldering, emitting flames or hot gases, or otherwise indicating that the solid waste is in the process of combustion or close to igniting. Ash that has not been fully quenched or cooled is considered a hot load. Such wastes may be accepted at the gate but shall be segregated and completely extinguished and cooled in a manner as safe and responsible as practical before disposal.

(9) Asbestos-containing material (ACM) waste with greater than 1 percent asbestos unless managed and disposed of pursuant to 567—Chapter 102, Division VI.

(10) Grit and bar screenings, grease skimmings, and sewage sludge unless managed and disposed of pursuant to 567—Chapter 102, Division VI.

(11) Waste tires unless each tire is processed into pieces no longer than 18 inches on any side.

(12) Yard waste, except in the circumstances given in Iowa Code section 455D.9(1).

(13) Lead-acid batteries.

(14) Waste oil and materials containing free-flowing waste oil. Materials contaminated with waste oil may be disposed of if no free-flowing oil is retained in the material and the material is not a hazardous waste.

(15) Baled solid waste unless the waste is baled on site after the waste has been visually inspected for prohibited materials.

c. Open burning and fire hazards. No open burning of any type shall be allowed within the permitted boundary of an MSWLF facility. The fueling of vehicles and equipment, and any other activity that may produce sparks or flame, shall be conducted at least 50 feet away from the working face.

d. Scavenging and salvaging. Scavenging shall not be allowed at the MSWLF facility. However, salvaging by MSWLF operators may be allowed by the permitted or other authorized entity.

e. Animal feeding and grazing. Feeding animals municipal solid waste shall not be allowed at an MSWLF facility. The grazing of domestic animals on fully vegetated areas of the MSWLF facility not used for disposal, including closed MSWLF units, may be allowed by the department so long as the animals do not cause damage or interfere with operations, inspections, environmental monitoring, and other required activities. Hoofed animals shall not be allowed on closed MSWLF units.

101.108(2) Disposal operations and activities. MSWLFs shall comply with the following requirements.

a. Survey controls and monuments. Survey controls and monuments shall be maintained as follows.

(1) The property boundary, the permitted boundary, and the boundaries of MSWLF units shall be surveyed and marked by a professional land surveyor at least once prior to closure.

(2) Prior to waste placement, all new MSWLF unit boundaries shall be surveyed and staked by an Iowa-licensed professional engineer or land surveyor.

(3) Survey monuments shall be established and maintained by an Iowa-licensed professional land surveyor to provide vertical and horizontal control.

(4) An Iowa-licensed professional engineer or land surveyor shall check vertical elevations and the progression of fill sequencing.

(5) All survey stakes and monuments shall be clearly marked.

(6) An Iowa-licensed professional engineer or land surveyor shall biennially inspect all survey monuments. Any missing or damaged survey monuments shall be replaced by a professional land surveyor.

b. First lift. The first lift and initial placement of MSW over a new MSWLF unit liner and leachate collection system shall comply with the following requirements.

(1) Waste shall not be placed in the new MSWLF unit until the QC&A officer has submitted a signed and sealed final report to the department pursuant to 101.107(4)“d” and that report has been approved by the department.

(2) Construction and earth-moving equipment shall not operate directly on the liner and leachate management system. Waste disposal operations shall begin at the edge of the new MSWLF unit by pushing MSW out over the liner and leachate collection system. Compactors and other similarly heavy equipment

shall not operate directly on the leachate collection system until a minimum of four feet of waste has been mounded over the top of the leachate collection system.

(3) Construction and demolitions (C&D) debris waste and materials clearly capable of spearing through the leachate collection system and liner shall not be placed in the first four feet of waste over the top of the leachate collection system. The first four feet of waste shall consist of select waste that is unlikely to damage the liner and performance of the leachate collection system.

(4) The owner or operator must place documentation in the operating record and submit a copy to the department that adequate cover material was placed over the top of the leachate collection system in the MSWLF unit or that freeze/thaw effects had no adverse impact on the compacted clay component of the liner.

c. Fill sequencing. The rate and phasing of disposal operations shall comply with the following requirements.

(1) The fill sequencing shall be planned and conducted in a manner and at a rate that does not cause a slope failure, lead to extreme differential settlement, or damage the liner and leachate collection system.

(2) The fill sequencing shall be planned and conducted in a manner compliant with the run-on and runoff requirements of 101.107(8) and surface water requirements of 567—101.110(455B).

d. Working face. The working face shall comply with the following requirements.

(1) The working face shall be no larger than necessary to accommodate the rate of disposal in a safe and efficient manner.

(2) The working face shall not be so steep as to cause heavy equipment and solid waste collection vehicles to roll over or otherwise lose control.

(3) Litter control devices of sufficient size to help prevent blowing litter shall be utilized at the working face. The operation of the working face shall attempt to minimize blowing litter.

(4) The operation of the working face shall prevent the harborage of vectors and attempt to minimize the attraction of vectors.

(5) Employees at the working face shall be trained to visually recognize universal symbols, markings and indications of prohibited wastes pursuant to 101.108(1) “b.”

e. Special wastes. Special wastes shall be managed and disposed of pursuant to 567—Chapter 102, Division VI.

f. Cover material and alternative cover material. Alternative cover material of an alternative thickness (e.g., tarps, spray covers) may be authorized if the owner or operator demonstrates to the department that the alternative material and thickness control vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment. Cover material or alternative cover material shall be available for use during all seasons in all types of weather. Cover material and alternative cover material shall be utilized as follows.

(1) Daily cover. Six inches of cover material or an approved depth or application of alternative cover material shall be placed and maintained over waste at the end of each operating day, or at more frequent intervals if necessary, to control vectors, fires, odors, blowing litter, and scavenging.

(2) Intermediate cover. At least one foot of compacted cover material or an approved depth or application of alternative cover material shall be placed and maintained over waste in the active portion that has not or will not receive more waste for at least 30 days. At least two feet of compacted cover material or alternative cover material shall be placed and maintained over waste that has not or will not receive waste for at least 180 days. Such active portions shall be seeded if they will not receive waste for a full growing season.

(3) Scarification of cover. To help prevent leachate seeps by aiding the downward flow of leachate, cover material or alternative cover material that prevents the downward flow of leachate and is at least five feet from the outer edge of the MSWLF unit shall be scarified prior to use of that area as a working face. Cover material or alternative cover material that does not impede the downward flow of leachate, as approved by the department, does not require scarification. Scarification may be as simple as the spearing or breaking up of a small area of the cover. Areas of intermediate cover may require removal of some of the cover material or alternative cover material to aid the downward flow of leachate.

(4) Final cover. Final cover over an MSWLF unit that is to be closed shall be constructed and maintained according to the closure and post-closure requirements of 567—101.112(455B) and 567—101.113(455B).

g. *Leachate seeps.* Leachate seeps shall be contained and plugged upon being identified. Leachate seeps shall not be allowed to reach waters of the state. Soils outside of the MSWLF unit that are contaminated by a leachate seep shall be excavated and then disposed of within the MSWLF unit. Such soils may be used for daily cover material.

h. *Leachate recirculation.* The department must approve an MSWLF unit for leachate recirculation. The primary goal of the leachate recirculation system is to help stabilize the waste in a more rapid, but controlled, manner. The leachate recirculation system shall not contaminate waters of the state, contribute to erosion, damage cover material, harm vegetation, or spray persons at the MSWLF facility. Leachate recirculation shall be limited to MSWLF units constructed with a composite liner.

i. *Differential settlement.* Areas of differential settlement sufficient to interfere with runoff and run-on shall be brought back up to the contours of the surrounding active portion. Differential settlement shall not be allowed to cause ponding of water on the active portion.

101.108(3) *Universally approved beneficial use determinations for alternative cover material.* The following alternative cover materials may be beneficially used as daily cover material at MSWLF in the manner and volume specified below. However, MSWLFs shall amend their sanitary landfill permits by notifying the department, and the department field office with jurisdiction over the facility, of their intent to utilize solid by-products pursuant to this rule at least 30 days prior to actual utilization of the by-products as alternative cover material.

a. *Asphalt shingles.* Asphalt shingles that are certified, consistent with federal regulations (Reference: Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy), as not containing more than 1 percent asbestos and are ground to an average size of three inches or less in any dimension may be mixed with soil in a 50/50 volume.

b. *Compost.* One hundred percent cured or finished compost, including compost overs, may be used.

c. *Diatomaceous earth.* Diatomaceous earth may be mixed with soil in a 50/50 volume.

d. *Foundry sand.* Foundry sand may be mixed with soil in a 50/50 volume.

e. *Glass.* Glass that has been ground to an average size of one-half inch or less in any dimension may be mixed with soil in a 10 percent glass and 90 percent soil by volume mixture.

f. *Gypsum and gypsum wallboard.* Gypsum and gypsum wallboard that have been ground to an average size of three inches or less in any dimension may be mixed with soil in a 50/50 volume.

g. *Paper mill sludge.* Uncontaminated, dewatered paper mill sludge may be mixed with soil in a 50/50 volume.

h. *Sandblasting abrasive.* Sandblasting abrasive and residuals may be mixed with soil in a 50/50 volume.

i. *Tire chips.* Tire chips that are an average size of three inches or less in any dimension may be mixed with soil in a 50/50 volume.

101.108(4) *Beneficial use determination application requirements for alternative cover material.* Unless the alternative cover material beneficial use is approved pursuant to 101.108(3), the applicant shall submit the following application information to the department to amend the MSWLF permit. The department may request that additional information be submitted in order to make a beneficial use determination. The department may also require specific beneficial use determination conditions and issue a temporary beneficial use determination on a trial basis.

If the department finds the application information to be incomplete, then it shall notify the applicant in writing of that fact and of the specific deficiencies and return the application materials to the applicant within 30 days of such notification. The applicant may reapply without prejudice.

a. The name, address, and telephone number of:

- (1) Owner of the site where the project will be located.
- (2) Applicant for the beneficial use determination.
- (3) Official responsible for the operation of the project.

(4) Professional engineer licensed by the state of Iowa and retained for the project, if any. The department may, at its sole discretion, require the applicant to retain a professional engineer for the project or specific parts thereof.

(5) Agency to be served by the project, if any.

(6) Responsible official of agency to be served.

b. A description of the proposed alternative cover material and whether it is to be used as daily, intermediate, or final cover.

c. The chemical and physical characteristics of the alternative cover material.

d. The proposed volume ratio of the alternative cover material(s) to soil or other alternative cover material(s).

e. A demonstration that there is a known or reasonably probable suitability of the alternative cover material as cover material by provision of previous case studies of the alternative cover material being utilized as cover material or information on the ability of the alternative cover material to do the following:

(1) Reduce or maintain current odor levels.

(2) Reduce or deter vectors.

(3) Reduce or maintain the current risk of fire.

(4) Control litter and dust.

(5) Impede the infiltration of liquids and precipitation.

(6) Control landfill gas migration.

(7) Provide a safe and effective working surface.

(8) Provide effective growing media.

(9) Other documentation that the alternative cover material is suitable for cover material.

(10) A demonstration that the proposed use of the alternative cover material will not adversely affect human health or the environment. The demonstration may include but is not limited to a toxicity characteristics leaching procedure (TCLP, EPA Method 1311) analysis of a representative sample of the alternative cover material.

101.108(5) *Beneficial use of alternative cover material and state goal progress.* Alternative cover material placed at no more than the thickness required by MSWLF rules shall be exempt from landfill tonnage measurements used for state goal progress and waste diversion calculations.

101.108(6) *Development and operations plan (DOPs).* An MSWLF unit shall maintain a DOPs. At a minimum, the DOPs shall detail how the facility will operate and how compliance with the requirements of this rule will be maintained. The DOPs shall contain at least the following components:

a. A title page and table of contents.

b. Telephone number and email address of the official responsible for the operation of the facility and an emergency contact person if different.

c. Service area of the facility and political jurisdictions included in that area.

d. Days and hours of operation of the facility.

e. Details of how the site will comply with the prohibited operations and activity requirements of 101.108(1) and any related permit conditions.

f. Details of how the site will comply with the disposal operation and activity requirements of 101.108(2) and any related permit conditions.

g. Details of how the site will comply with the facility operations and activity requirements of 101.108(3), any related permit conditions, and any leachate and wastewater treatment requirements.

[ARC 0482D, IAB 8/19/26, effective 9/23/26]