

CHAPTER 100
SCOPE OF TITLE – DEFINITIONS – RULES OF PRACTICE

567—100.1(455B,455D) Scope of title. The department has jurisdiction over the management, dumping, depositing, and disposal of solid waste by establishing standards and regulating solid waste through a system of general rules and specific permits. The construction and operation of any sanitary disposal project or solid waste management activity requires a specific permit from the department.

This chapter provides general definitions applicable to Title VIII (solid waste management and disposal) of the commission’s rules and general conditions of solid waste disposal.

567—100.2(455B,455D) Definitions. For the purpose of this title, the following terms shall have the meaning indicated in this chapter. The definitions set out in Iowa Code section 455B.301 and Iowa Code chapter 455D shall be considered to be incorporated verbatim in these rules.

“*Agricultural waste*” means organic materials normally discarded during the production of plants and animals from agronomic, horticultural or silvicultural operations. “Agricultural waste” includes but is not limited to manure, crop residuals, bedding, and other vegetative by-products produced during farm processing. Dead animals are not included.

“*Airport*” means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

“*Annular space*” means the open space formed between the borehole and the well casing.

“*Aquifer*” means a saturated geologic formation or combination of formations which has appreciably greater ability to transmit water than do adjacent formations. Typically, an aquifer is capable of yielding usable quantities of water to a well.

“*Areas susceptible to mass movement*” means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the sanitary landfill site, because of natural or man-induced events, results in the down slope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil function, block sliding, and rockfall.

“*Attendant*” means an employee of a sanitary disposal project who is not employed or assigned to operate the equipment used on the site.

“*Bird hazard*” means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

“*Bulking agent*” means a material that contributes structure and porosity, usually a dry, rigid material such as shredded wood.

“*Cathode ray tube*” or “*CRT*” means a vacuum tube composed primarily of leaded glass which is the visual or video display component of an electronic device. An intact CRT means a CRT whose vacuum has not been released. A broken CRT means glass removed from its housing or casing whose vacuum has been released.

“*Certified Compostable Products*” means any product specifically manufactured to break down in a compost system at the end of its useful life. Examples include containers, films, or foodservice ware such as bowls, plates, cups, cutlery, and bio-plastic liner bags. Products are composed of materials such as vegetable matter, paper, cardboard, and plastics and are certified as conforming to ASTM D6400 or ASTM D6868 standards.

“*CFR*” means Code of Federal Regulations.

“*Commission*” means the environmental protection commission.

“*Compostable*” means an organic material that undergoes degradation by biological processes during composting to yield carbon dioxide, water, inorganic compounds and biomass.

“*Compost*” means the product manufactured through the controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which

significantly reduces the viability of pathogens and weed seeds and stabilizes the carbon such that it is beneficial to plant growth.

“Composting” means the controlled process and management of aerobic, biological decomposition resulting in an innocuous final product. This process significantly reduces the viability of pathogens and weed seeds and stabilizes the carbon such that it is beneficial to plant growth.

“Composting facility” means all related receiving, processing, production, curing, and storage areas and necessary roads, buildings, equipment, litter control devices, pollution control devices, fire control devices, landscaping, gates, personnel and maintenance facilities, sewer and water lines, and process water.

“Comprehensive plan” means a course of action developed and established cooperatively between cities, counties and municipal solid waste sanitary disposal projects regarding their chosen integrated solid waste management system, its participants, waste reduction strategies, and disposal methods.

“Comprehensive plan amendment” means a notification, filed between comprehensive plan updates, that the planning agency seeks to change the participation or change the designated disposal project(s) as set out in the most recent approved comprehensive plan submittal.

“Comprehensive plan update” means a planning document that provides status reports on the integrated solid waste management system and that describes revision to the information and evaluation of the integrated solid waste management system and the proposed course of action for the next planning cycle.

“Confined aquifer” means an aquifer with a confining bed above and below. Water in a confined aquifer is under pressure such that water rises above the top of the aquifer in a well which penetrates the aquifer.

“Confining bed” means a geologic formation exhibiting relatively low ability to transmit water compared to adjacent formations. Confining beds are typically not capable of yielding usable quantities of water to a well.

“Construction and demolition waste” means waste building materials including wood, metals and rubble which result from construction or demolition of structures. Such waste shall also include trees.

“Construction and demolition waste disposal site” means a sanitary landfill which accepts only construction and demolition wastes.

“Consumer price index” means the measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. For the purpose of this title, consumer price index refers to All Urban Consumers (CPI-U), All Items, as published by the U.S. Bureau of Labor Statistics.

“Contact Water” means liquid that has run off, or emerged from, raw feedstock and materials that are being processed, or a liquid that has come into contact with equipment dedicated to the handling of raw feedstocks or unstabilized compost, and which contains extracted, dissolved, or suspended materials. Contact water also includes condensate from gasses resulting from the composting process. It does not include water from curing materials, finished compost or product storage piles.

“Contaminated animal carcasses” means waste including carcasses, body parts and bedding of animals that were exposed to infectious agents during research, production of biologicals, or testing of pharmaceuticals.

“Contaminated sharps” means any contaminated object that can penetrate the skin, including but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

“Contaminated soil” means soil that contains any harmful constituent in a concentration that may harm human health.

“CRT collection” means any activity by a CRT recycling facility or CRT collection facility involving the collection of discarded CRTs that is not a short-term CRT collection event.

“CRT collection facility” means a property where ongoing CRT collection is the only CRT recycling activity performed.

“CRT recycling” means any process by which discarded CRTs that would otherwise become waste are collected, processed and returned to use in the form of raw materials or products. CRT recycling includes but is not limited to receiving broken or intact CRTs, intentionally breaking intact CRTs or further breaking or separating broken CRTs, and sorting or otherwise managing glass removed from CRT monitors.

“CRT recycling facility” means a property where CRT recycling takes place. A CRT recycling facility may also collect CRTs.

“Cultures and stocks of infectious agents” means specimen cultures collected from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biological agents, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate or mix cultures.

“Cured compost” means compost that is both stable and mature according to the definitions found in this division.

“Curing” means a continuation of the composting process after the high heat stage during which maturity continues to increase.

“Discarded” means no longer to be used for the original intended purpose and means the letting go or throwing away of materials that have become useless or superfluous though often not intrinsically valueless.

“Displacement” means the relative movement of any two sides of a fault measured in any direction.

“Downgradient” means direction of decreasing hydraulic head.

“Downgradient well” means a well which has been installed downgradient of the site and is capable of detecting the migration of contaminants from the site.

“FAA certified airport” means an airport serving air carriers certified by the Civil Aeronautics Board that has been issued an airport operating certificate from the Administrator of the Federal Aviation Administration pursuant to Section 612 of the Federal Aviation Act, 49 U.S.C. §1432, and 49 CFR Part 139.

“Fault” means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

“Finished compost” means cured and, if necessary, screened or refined.

“Fiscal year” means the state fiscal year from July 1 through June 30.

“Flood plain” means the area adjoining a river or stream which has been or may be hereafter covered by flood water.

“Free liquid” means the liquid produced when a 100-milliliter or 100-gram representative sample is placed on a standard mesh number 60 (fine mesh size) conical paint filter for five minutes. Method 9095 EPA SW 846.

“Garbage” means all solid and semisolid, putrescible animal and vegetable wastes resulting from the handling, preparing, cooking, storing, serving and consuming of food or of material intended for use as food, and all offal, excluding useful industrial byproducts, and shall include all such substances from all public and private establishments and from all residences.

“Geologic cross section” means a drawing of a subsurface profile showing the various strata encountered.

“Groundwater flow path” means the route of water (and contaminant) travel within the groundwater system.

“High water table” means the position of the water table which occurs in times of above normal precipitation.

“Holocene” means the most recent epoch of the Quaternary Period, extending from the end of the Pleistocene Epoch to the present.

“Human blood and blood products” means human serum, plasma, other blood components, bulk blood, or containerized blood in quantities greater than 20 milliliters.

“Hydraulic head” means the energy contained at a point in the groundwater system. Hydraulic head is measured as the elevation to which water rises in a piezometer.

“Incidental solid waste transfer” means the truck-to-truck transfer of solid waste from a satellite solid waste collection vehicle to a solid waste collection vehicle, if that solid waste could be collected only by a satellite solid waste collection vehicle due to vehicle access restrictions.

“Incineration” means the processing and burning of solid waste for the purpose of volume and weight reduction in facilities designed for such use.

“Incorporation” means to mix into the soil by tilling, disking, or other suitable means.

“Industrial process wastes” means waste that is generated as a result of manufacturing activities, product processing or commercial activities. It does not include office waste, cafeteria waste, or other types that are not the direct result of production processes.

“Infectious” means containing pathogens with sufficient virulence and quantity so that exposure to an infectious agent by a susceptible host could result in an infectious disease when the infectious agent is improperly treated, stored, transplanted, or disposed of.

“Infectious waste” means waste which is infectious, including but not limited to contaminated sharps, cultures and stocks of infectious agents, blood and blood products, pathological waste, and contaminated animal carcasses from hospitals or research laboratories.

“Initial comprehensive plan” means a first or new comprehensive plan filed with the department pursuant to the provisions of Iowa Code section 455B.306.

“Integrated solid waste management” means any solid waste management system which is focused on planned development of programs and facilities that reduce waste volume and toxicity, recycle marketable materials and provide for safe disposal of any residuals.

“Karst terranes” means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

“Land application” means a method through which sludge is applied to the ground surface. Land application may include subsurface injection.

“Landfarm” means the area of land used to landfarm a single application of a particular source and type of PCS. Landfarms are created when a permitted landfarm applicator, or party under the applicator’s supervision, applies PCS to the land. No other PCS may be applied within 15 feet of the area of land used as a landfarm until the landfarm is closed pursuant to 567—Chapter 102, division III.

“Landfarm applicator” means an entity permitted by the department to apply PCS to the land to create one or more landfarms.

“Landfarming” means a surface-level soil remediation technology for petroleum contaminated soils that reduces concentrations of petroleum constituents through biodegradation to a level safe for human health and the environment. This technology usually involves spreading excavated contaminated soils in a thin layer on the ground surface and stimulating aerobic microbial activity within the soils through aeration. The enhanced microbial activity results in degradation of adsorbed petroleum product constituents through microbial respiration. Some petroleum product constituents volatilize during the landfarming process.

“Landfarm plot” means the specific operating area of a landfarm upon which a particular source and type of PCS is applied.

“Landfarm season” means the period of the year when the ground is not frozen or snow-covered and runoff from these situations is not expected to transport PCS beyond the landfarm area.

“Landfill property” means the entire area of the landfill including the disposal site and any other contiguous property proposed for actual landfill use.

“Land pollution” means the presence in or on the land of any solid waste in such quantity, of such nature and for such duration and under such condition as would affect injuriously any waters of the state, cause air pollution or create a nuisance.

“License” is defined in Iowa Code section 17A.2.

“Lithified earth material” means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

“Lower explosive limit” means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25° Celsius and atmospheric pressure.

“Maturity” means the degree or level of completeness of composting. Mature compost is free of phytotoxic components.

“Maximum horizontal acceleration in lithified earth material” means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

“Monitoring well” means any well installed solely for the sampling of groundwater quality at a given location and depth and constructed in a manner approved by the department.

“Municipal solid waste landfill (MSWLF)” means a discrete area of land or an excavation that receives household waste, and that is not a land application site, surface impoundment, injection well, or waste pile, as those terms are defined under 40 Code of Federal Regulations Part 257.2. An MSWLF also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous dry sludge, and industrial solid waste. An MSWLF may be publicly or privately owned. An MSWLF may be a new MSWLF site, an existing MSWLF site, or a lateral expansion.

“Municipal solid waste sanitary disposal project” means all facilities and appurtenances, including all real and personal property connected with such facilities, which are acquired, purchased, constructed, reconstructed, equipped, improved, extended, maintained, or operated to facilitate the final disposition of household waste without creating a significant hazard to the public health or safety. A municipal solid waste sanitary disposal project also may receive other types of RCRA Subtitle D wastes, such as construction and demolition debris and commercial and industrial solid waste.

“Nonstandard PCS” means soil contaminated with a petroleum product other than gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

“Open burning” means any burning of combustible materials where the products of combustion are emitted into the open air without passing through a chimney or stack.

“Open dump” means any exposed accumulation of solid waste at a site other than a sanitary disposal project operating under a permit from the department.

“Open dumping” means the illegal depositing of solid wastes on the surface of the ground or into a body or stream of water.

“Operating area” means the immediate portion of a sanitary disposal project used for unloading and handling of solid waste to prepare it for processing or final disposal.

“Operator” means an individual who is employed and assigned to operate the equipment used on the site.

“Organic materials” means any material of animal or plant origin.

“Pathological waste” means human tissues and body parts that are removed during surgery or autopsy.

“Perched saturated zone” means a localized saturated zone occurring above the regional zone of saturation. The perched saturated zone’s presence is caused by a lens of relatively impermeable material within the unsaturated zone that impedes the downward movement of water toward the zone of saturation.

“Petroleum contaminated soil” or *“PCS”* means soil contaminated with petroleum products including, but not limited to, gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

“Piezometers” are devices used to measure hydraulic head at a specific point in the groundwater system. Piezometers are generally small diameter wells sealed along the entire length and open to water only at the bottom through a short section of well screen, which is the point where hydraulic head is measured. A piezometer may be constructed similar to a monitoring well or may be a driven well point.

“Planning agency” means the designated contact agency on file with the department.

“Planning area” means the combined jurisdiction of the local governments and the designated municipal solid waste sanitary disposal project(s) involved in a comprehensive plan. A planning area may include one or more municipal solid waste sanitary disposal projects.

“Planning cycle” means the length of time between the due date for each comprehensive plan update submittal as approved by the department, which shall be every five years on a schedule prescribed by the department.

“Pollution control waste” means any solid waste residue extracted by, or resulting from, the operation of pollution control equipment.

“*Poor foundation conditions*” means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of an MSWLF site.

“*Potentiometric surface*” means the imaginary surface that represents the level to which water from an aquifer (confined or unconfined) will rise in wells.

“*Premises*” means a geographically contiguous property owned by a generator or noncontiguous property owned by a generator and that is connected by a controlled right-of-way to which the public does not have access. Two or more pieces of property that are geographically contiguous and divided by public or private right-of-way are a single premises.

“*Public agency*” is defined in Iowa Code section 28E.2.

“*Raw rendering material*” means any body, part of a body, or product of a body of any dead animal that is unwholesome, condemned, inedible, or otherwise unfit for human consumption.

“*Refuse*” means putrescible and nonputrescible wastes including but not limited to garbage, rubbish, ashes, incinerator ash, incinerator residues, street cleanings, market and industrial solid wastes and sewage treatment wastes in dry or semisolid form.

“*Refuse collection service*” means a publicly or privately operated agency, business or service engaged in the collecting and transporting of solid waste for disposal purposes.

“*Resource Conservation and Recovery Act (RCRA)*” is defined in title 40 of the Code of Federal Regulations (CFR), parts 239 through 282.

“*Rubbish*” means nonputrescible solid waste consisting of combustible and noncombustible wastes, such as ashes, paper, cardboard, tin cans, glass, bedding, crockery or litter of any kind.

“*Salvageable material*” means discarded material no longer of value for its original purpose but which has value if reclaimed.

“*Salvaging*” means the systematic removal of salvageable material in a formal and orderly manner as a part of the normal operating procedure of a sanitary disposal project.

“*Sanitary disposal*” means a method of treating solid waste so that it does not produce a hazard to the public health or safety or create a nuisance.

“*Sanitary landfill operator*” means an individual having active, daily, on-site responsibility for day-to-day operation of a department-permitted sanitary landfill. This individual must also have the authority to turn waste away at the gate when the waste is considered unacceptable.

“*Satellite solid waste collection vehicle*” means a small, specialized solid waste collection vehicle that has been specifically designed to service locations that have vehicle access restrictions that would otherwise render solid waste collection technically prohibitive.

“*Scavenging*” means the uncontrolled removal of materials from the unloading or working area of a sanitary disposal project.

“*Seismic impact zone*” means an area with a 10 percent or greater probability that the maximum horizontal acceleration in the lithified earth material, expressed as a percentage of the earth’s gravitational pull, will exceed 0.10g in 250 years.

“*Service area*” means an area served by a specific municipal solid waste sanitary disposal project defined in terms of the jurisdictions of the local governments using the facility. A planning area may include more than one service area.

“*Sewage sludge*” is defined in 567—Chapter 67.

“*Shelby tube*” means a thin-walled, seamless steel tube with a sharp cutting edge which is used to obtain undisturbed samples of cohesive or moderately cohesive soils (silts and clays).

“*Shoreland*” means land within 300 feet of the high water mark of any natural or artificial, publicly or privately owned lake or any impoundment of water used as a source of public water supply.

“*Short-term CRT collection event*” means any temporary activity involving the collection of discarded CRTs for recycling that is not on the premises of a CRT recycling facility or CRT collection facility.

“*Site*” means any location, place or tract of land used for collection, storage, conversion, utilization, incineration or landfilling of solid waste, to include the landfill area, nonfill work areas, borrow areas plus

a 100-foot wide perimeter surrounding the working areas or the property line if it is closer than 100 feet to the working areas.

“*Sludge*” means any solid, semisolid, or liquid waste generated from a commercial or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility

“*Soil boring*” means a hole drilled or driven into the subsurface for the purpose of determining subsurface characteristics.

“*Solid waste*” has the same meaning as found in Iowa Code section 455B.301. Pursuant to Iowa Code paragraph 455B.301(29)“*b*,” the commission has determined that solid waste includes those wastes exempted from federal hazardous waste regulation pursuant to 40 CFR 261.4(b) as amended through [effective date of this rule], except to the extent that any such exempted substances are liquid wastes or wastewater. This definition applies to all chapters within Title VIII. To the extent that there is a conflict, this definition controls.

“*Solid waste collection*” means the gathering of solid waste from public and private places.

“*Solid waste collection vehicle*” means a vehicle that has the primary purpose of collecting solid waste from a variety of locations, including at curbside and from dumpsters, compactors, and roll-off boxes.

“*Solid waste incinerator operator*” means an individual with active, daily, on-site responsibility for day-to-day operation of a permitted solid waste incinerator. This individual must also have the authority to turn waste away when it has been determined to be unacceptable.

“*Solid waste storage*” means the holding of solid waste pending intermediate or final disposal.

“*Solid waste transfer station*” means any site, location, tract of land, installation or building that has the primary purpose of receiving solid waste generated off the premises from multiple generators and consolidating the waste prior to transporting it to a final disposal facility. A solid waste transfer station is a sanitary disposal project and may hold or store solid waste before transport for a short period. A solid waste transfer station is not a final disposal facility.

“*Solid waste transport vehicle*” means a vehicle that has the primary purpose of transporting solid waste received by a solid waste transfer station (e.g., walking floor semi-trailer).

“*Solid waste transportation*” means the conveying of solid waste from one place to another by means of vehicle, rail car, water vessel, conveyor or other means.

“*Source of PCS*” means the contaminated area from which the PCS originated. Examples of a source include, but are not limited to, a specific gas station or spill location.

“*Special wastes*” means any industrial process waste, pollution control waste, or toxic waste which presents a threat to human health or the environment or a waste with inherent properties which make the disposal of the waste in a sanitary landfill difficult to manage. Special waste does not include domestic, office, commercial, medical, or industrial waste that does not require special handling or limitations on its disposal. Special waste does not include hazardous wastes which are regulated under the federal Resource Conservation and Recovery Act (RCRA), hazardous waste as defined in Iowa Code section 455B.411, subsection 3, or hazardous wastes included in the list compiled in accordance with Iowa Code section 455B.464.

“*Specific yield*” means the ratio of the volume of water that a given mass of saturated rock or soil will yield by gravity to the volume of that mass. This ratio is stated as a percentage.

“*Split spoon sampler*” means a device used in conjunction with a drilling rig to obtain core samples from unconsolidated strata.

“*Stability*” means a stage in the composting process when microbial activity is diminished with the corresponding decrease of available organic carbon and other energy sources. Stable compost consumes little nitrogen and oxygen and generates little CO₂ or heat.

“*Stabilized sludge*” means sludge that has been processed to a point where it has the ability to resist further change, produces minimal odor, and has achieved a substantial reduction in the pathogenic organism content. (The department recognizes principles of stabilization other than the conventional biological processes. Whether these processes produce a stabilized sludge will be evaluated on an individual basis.)

“*Standard PCS*” means soil contaminated with gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

“*Storage coefficient*” means the volume of water an aquifer releases from or takes into storage per unit surface area of aquifer per unit change in head.

“*Structural components*” means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment.

“*Surge pit*” means a pit inside a solid waste transfer station building that receives solid waste from the tipping floor or directly from solid waste collection vehicles. Surge pits provide more space for temporary storage during peak operating hours and allow for additional compaction of the solid waste before it is loaded into solid waste transport vehicles.

“*Tar ball*” means a ball or conglomeration of tarlike petroleum constituents. Tar balls may form when PCS that contains a high concentration of long-chain or high molecular weight hydrocarbons is landfarmed.

“*Toxic wastes*” means materials containing poisons, biocides, acids, caustics, pathological wastes, and similar harmful wastes which may require special handling and disposal procedures to protect the environment and the persons involved in the storage, transport and disposal of the wastes.

“*Transmissivity*” means the rate at which water is transmitted through a unit width of an aquifer under a unit hydraulic gradient.

“*Trees*” means trunks, limbs, stumps, or branches from trees or shrubs and untreated, uncoated, chemically unchanged wood wastes. This shall not include wood products which are part of an otherwise defined waste or have been contaminated by coatings, treatments or metals.

“*Tremie tube*” means a pipe used to carry materials (gravel pack, grout, etc.) to the bottom of a boring and allow placement from the bottom up without segregation of materials or introduction of appreciable air pockets.

“*Truck-to-truck transfer*” means the direct transfer of solid waste from one vehicle to a second vehicle with no intermediary handling.

“*Type of PCS*” means the specific petroleum product or combination thereof that contaminated the soil. Examples of type include, but are not limited to, gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

“*Unconfined aquifer*” means an aquifer which does not have a confining bed above it. The level of water in a well in an unconfined aquifer is below the top of the aquifer formation.

“*Unsaturated zone*” means the subsurface zone above the water table in which the interstitial spaces are only partially filled with water or not filled at all.

“*Unstable area*” means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terranes.

“*Upgradient*” means direction of increasing hydraulic head.

“*Upgradient well*” means a well which is capable of yielding groundwater samples that are representative of regional conditions and are not affected by the landfill site. Such a well is typically placed upgradient of the site, if possible, and, if not, is placed in an upgradient direction and as near the site as feasible.

“*Vector*” means a carrier organism that is capable of transmitting a pathogen from one organism to another. Vectors include, but are not limited to, birds, rats and other rodents, and insects.

“*Washwater*” means a water-based liquid that has either originated from solid waste unloaded inside the enclosed portion of a transfer station or that has come into contact with enclosed transfer station areas that have come into contact with solid waste.

“*Water table*” means the water surface below the ground at which the unsaturated zone ends and the saturated zone begins.

“*Water well*” is defined in Iowa Code subsection 455B.171(44)

“*Yard waste*” means debris such as grass clippings, leaves, garden waste, brush and trees. Yard waste does not include tree stumps.

“Zone of saturation” means the subsurface zone below the water table in which the interstitial spaces are completely filled with water.

567—100.3(455B,455D) Permit required. No public or private agency shall construct or operate a sanitary disposal project or solid waste management activity without first obtaining a permit from the department. In order to be issued a municipal solid waste sanitary disposal project permit, the permit applicant must also satisfy the comprehensive planning requirements set forth in 567—Chapter 104. The issuance of a permit by the department in no way relieves the applicant of the responsibility of complying with all other local, state, or federal statutes, ordinances, and rules or other requirements applicable to the solid waste management activity.

567—100.4(455B,455D) Types of permits. There are five types of permits issued by the director. These are described in this rule.

100.4(1) Sanitary disposal project permit. This permit is issued by the director under the authority of Iowa Code section 455B.305 to facilitate the final disposition of solid waste. Such permits are issued for a term of up to ten years and are renewable for similar terms.

a. Applications for renewal to be timely filed must be received at the department’s office at least 90 days prior to the expiration date of the existing permit on a form prescribed by the department.

b. The department may conduct an inspection of the sanitary disposal project following receipt of the application for renewal. Following the inspection, the permit holder shall be notified of all measures needed to bring the sanitary disposal project into conformance with Iowa Code chapter 455B and the applicable rules.

c. A permit shall be renewed when a properly completed application has been received and all corrective measures required under paragraph 100.4(1) “b” have been completed.

100.4(2) Solid waste management permit. This permit is issued by the director under the authority of Iowa Code chapters 455B and 455D for the management of solid waste. Such permits are issued for a term of up to five years and are renewable for similar terms.

a. Applications for renewal to be timely filed must be received at the department’s office at least 90 days prior to the expiration date of the existing permit on a form prescribed by the department.

b. The department may conduct an inspection of the solid waste management activity following receipt of the application for renewal. Following the inspection, the permit holder shall be notified of all measures needed to bring the solid waste management activity into conformance with Iowa Code chapter 455B, Iowa Code chapter 455D, and the applicable rules.

c. A permit shall be renewed when a properly completed application has been received and all corrective measures required under paragraph 100.4(2) “b” have been completed.

100.4(3) Developmental permit. The director may issue a developmental permit for construction and operation of a sanitary disposal project or solid waste management activity which is not specifically described in these rules if the permit applicant demonstrates at a public hearing that the proposed project can provide satisfactory management or disposal of solid waste without adverse health-related or environmental effects.

a. No such permit shall be issued until the director, after public hearing, considers and approves the proposed project.

b. Developmental permits shall be issued for a term no less than one year and no more than three years.

c. Developmental permits may be renewed if the director finds, following public hearing, that the project provided satisfactory management or disposal of solid waste without adverse health-related or environmental effects over the term of the prior permit.

100.4(4) Temporary permit. This permit is issued by the director under the authority of Iowa Code subsection 455B.307(1) for sanitary disposal projects that do not comply with the requirements of Iowa Code chapter 455B and these rules. Such permits are issued for a term of one year, and are renewable.

Temporary permits may be renewed if the director finds that the public interest will be best served by granting a renewal and the conditions of the previous temporary permit have been complied with.

a. Temporary permits shall incorporate as a condition, a compliance schedule specifying how and when the applicant will meet the requirements of Iowa Code chapter 455B and these rules.

b. The decision of the director whether to issue a temporary permit, being discretionary, shall be a final decision. Once a temporary permit has been issued, it may be suspended or revoked only as provided in Iowa Code section 455B.305 and 561—Chapter 7.

100.4(5) Closure permit. This permit is issued by the director under the authority of Iowa Code section 455B.305 for sanitary disposal projects that no longer accept solid waste. Such permits are issued for a term of up to 30 years. The term of subsequent renewal of the permit, if the post-closure period is extended, will be determined on a site-specific basis. A sanitary disposal project shall require a closure permit until the department determines that post-closure maintenance, monitoring, and operation of a leachate control system, if applicable, are no longer necessary.

a. Application shall be filed at the time of departmental notification of intended closure.

b. The application for issuance of this permit to a municipal solid waste sanitary disposal project shall be based on a previously approved comprehensive plan and the rules adopted pursuant to the authority of Iowa Code section 455B.306.

c. This permit shall require submission of an annual audit report, pursuant to Iowa Code paragraph 455B.306(9)(e), detailing the status of the financial instrument and other funds as required to guarantee completion of post-closure and monitoring requirements.

d. Requests for permit modification may be initiated by the department or by the permit holder.

e. At the end of the applicable post-closure period, and upon satisfactory completion of all required post-closure activities as established by Iowa Code chapter 455B, written notification shall be issued by the director stating that a permit is no longer required for the facility.

567—100.5(455B,455D) Permit applications.

100.5(1) Each application for a permit to construct and operate a sanitary disposal project or solid waste management activity, shall include the following, unless project conditions render the specific item as not applicable. The rationale for exclusion of any item that is determined not to be applicable must be provided in either the body of the application or as a supplement to facilitate department review. Each application shall be on a form prescribed by the department and include specific information as required within 567—Chapter 101 or 567—Chapter 102, as applicable.

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

(1) Owner of site where project will be located.

(2) Permit applicant.

(3) Official responsible for operation of the project.

(4) Professional engineer (P.E.) licensed in the state of Iowa and retained for financial assurance or the design of the facility, if any.

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

(6) Responsible official of agency to be served, if any.

b. A legal description and physical address of the site.

c. A map or aerial photograph locating the boundaries of the site and identifying:

(1) North or other principal compass points.

(2) Zoning and land use within one-half mile.

(3) Haul routes to and from the site with load limits or other restrictions.

(4) Homes and buildings within one-half mile.

(5) Section lines or other legal boundaries.

d. Type, source, and expected volume or weight of solid waste to be handled per day, week and year.

e. For municipal solid waste sanitary disposal projects, the solid waste comprehensive planning area of the facility and political jurisdictions included within that area.

f. A detailed description of the management or disposal process to be used, and the sanitary disposal project designated for final disposal, if applicable.

g. A listing of equipment available on site for operations, including types as well as size, capacity, and production rates.

h. Proof of the applicant's ownership of the site or legal entitlement to use the site for the management of solid waste.

i. A closure plan shall be submitted at the time of application which:

(1) Details how and when the facility will be closed in accordance with applicable requirements.

(2) Describes the proposed groundwater monitoring plan, leachate control system, and site inspection and maintenance activities, if applicable.

(3) States the name, address, email and telephone number of the person or office to serve as contact with regard to the facility during the post-closure period, if applicable.

j. For sanitary disposal projects, an emergency response and remedial action plan (ERRAP) pursuant to rule 567—100.14(455B).

k. Financial assurance pursuant to 567—Chapter 101, division VIII for all sanitary disposal projects.

l. Such other information as may be required by the director.

100.5(2) *Incomplete applications.* If an application for a permit is found to be incomplete by the department, the applicant will be notified of that fact and of the specific deficiencies. Thirty days following such notification, the application may be returned by the department as incomplete without prejudice to the applicant's right to reapply. The applicant may be granted, upon request, an additional 30 days to complete the application. If an application for a renewal or modification is found to be incomplete by the department, the applicant will be notified of that fact and of the specific deficiencies. Thirty days following such notification, the application for a renewal or modification may be denied by the department.

100.5(3) *Request and approval of renewal.* Requests for renewal shall adhere to the provisions of paragraph 100.4(1)"a" or paragraph 100.4(2)"a," as applicable, and include supporting documentation and materials. The department may request that additional information be submitted for review to make a permit issuance decision. The department shall renew the permit if, after a review and inspection of the facility and its compliance history, the department finds that the facility is in compliance with Iowa Code chapters 455B and 455D, these rules and the conditions of the permit, and is making a good-faith effort to maintain compliance. If the facility is found not to be in compliance with Iowa Code chapters 455B and 455D, these rules, and the conditions of the permit, or if a good-faith effort to maintain compliance is not being made, the project shall be placed on a compliance schedule approved by the department before the permit is renewed. The permit may be renewed with new conditions pursuant to rule 567—100.8(455B,455D).

100.5(4) *Request for permit modification.* A request for permit modification shall be submitted in writing to the department with supporting documentation and materials. The department may also request that information pursuant to subrule 100.5(1) be resubmitted, in part or in whole, in order to make a permit modification decision. The modified permit may be approved with new conditions pursuant to rule 567—100.8(455B,455D).

567—100.6(455B,455D) Construction and operation. All sanitary disposal projects and solid waste management activities shall be constructed and operated according to the plans and specifications as approved by the department and the conditions of the permit. The approved plans and specifications shall constitute a condition of the permit.

567—100.7(455B,455D) Inspection prior to start-up. The department shall be notified when the construction of a sanitary disposal project or solid waste management activity has been completed, in order that an inspection may be made to determine if the project has been constructed as designed and approved by the department. No solid waste shall be accepted by a sanitary disposal project or solid waste management activity until it has been inspected and approved by the department.

567—100.8(455B,455D) Permit conditions. Any permit may be issued subject to conditions specified in writing by the department that are necessary to ensure that the project is constructed and operated in compliance with Iowa Code chapters 455B and 455D, and these rules.

567—100.9(455B,455D) General operating requirements for sanitary disposal projects and solid waste management activities. Every application for a permit issued by the department shall detail the means by which the following operating requirements shall be complied with. All projects shall be operated in conformance with these requirements.

100.9(1) Open burning shall be prohibited except when permitted by 567—Chapter 23. Any burning to be conducted at the site shall be at a location separate and distinct from the operating area.

100.9(2) Litter shall be confined to the property on which the project is located. At the conclusion of each day of operation, any litter strewn beyond the confines of the operating area shall be collected and stored in covered leakproof containers or properly disposed.

100.9(3) Scavenging shall be prohibited. Any salvaging to be conducted must be described in the application and all salvaged materials must be stored and removed from the project site in conformance with the permit conditions. Each area where salvaged materials are stored shall be segregated and clearly marked.

100.9(4) Effective means shall be taken to prevent the attraction or harborage of vectors and to prevent a nuisance or public health hazard.

100.9(5) Equipment designated in the plans and specifications or equivalent equipment shall be used to operate the site at all times.

100.9(6) The major internal roads shall be of all-weather construction and maintained in good condition. Dust shall be controlled on internal roads.

100.9(7) Signage. Sites shall have a permanent sign posted at the site entrance specifying:

- a. Name of the operation.
- b. Site permit number.
- c. The hours and days the site is open to the public, if applicable.
- d. The categories of waste which will be accepted for disposal, or as an alternative, identifies the categories of waste which are prohibited.
- e. Telephone number.

567—100.10(455B,455D) General closure requirements for sanitary disposal projects and solid waste management activities. Every application for a permit issued by the department shall detail the means by which the following closure requirements shall be complied with. All projects shall be closed in conformance with these requirements.

100.10(1) The owner or operator shall submit to the local political jurisdictions, the department, and department field office with jurisdiction over the facility, at least 90 days written notice of intent to permanently close or suspend operations.

100.10(2) Notice shall be posted at least 90 days prior to closure at the facility indicating the date of closure and alternative solid waste management facilities. If open to the public, notice of closure shall be published at least 90 days prior to closure in a newspaper of local circulation. This notice shall include the date of closure, and where applicable, identification of alternative solid waste management facilities.

100.10(3) Unless otherwise authorized by the department, implementation of the closure plan shall be completed within 90 days of the closure of the facility. The owner and an Iowa-licensed professional engineer shall certify that the closure plan has been implemented in compliance with this rule, the closure plan and the permit. Closure shall not be official until the department has inspected the site and given written certification of the completion of proper disposal of all solid waste.

100.10(4) Upon completion of closure activities, as-built plans shall be submitted showing changes from the original design plans, if any, test results indicating compliance with final cover, where applicable, waste removal, equipment decontamination, and other forms of closure documentation requested by the department.

567—100.11(455B,455D) Compliance with rule changes.

100.11(1) *Design and construction.* Sanitary disposal projects and solid waste management activities designed and constructed in accordance with rules in effect at the time of construction shall not be required to be redesigned or reconstructed due to subsequent rule changes unless the department finds that such facilities pose a threat to human health or the environment. Such facilities shall be brought into compliance with rules in effect at the time of reconstruction, expansion, or otherwise modifying the project, or at the time of permit renewal.

100.11(2) *Operation.* If any new rule conflicts with an operating procedure prescribed in the engineering plans or the permit of a sanitary disposal project or solid waste management activity, the operation shall conform with the new rule.

567—100.12(455B,455D) Transfer of title. If title to a sanitary disposal project or solid waste management activity is transferred, and the transferee desires to continue operation of the project, the transferee shall apply in writing to the department within 30 days of the title transfer for a transfer of the permit.

100.12(1) The department shall transfer the permit when it determines that the site is in compliance with Iowa Code chapter 455B, Iowa Code chapter 455D, these rules and the conditions of the permit, and that the transferee possesses the equipment and personnel to operate the project in conformance with applicable rules and the conditions of the permit.

100.12(2) No permit is valid after 60 days following transfer of title, unless the permit has been transferred by the department to the new titleholder pursuant to this rule. If the permit has not been transferred within the 60 days, the new titleholder shall submit a complete permit application to operate the sanitary disposal project or solid waste management activity pursuant to rule 567—100.5(455B,455D).

567—100.13(455B,455D) Effect of revocation. The director may revoke and reissue, or terminate, in whole or in part, any permit for cause. If a permit held by any public or private agency for a sanitary disposal project or solid waste management activity is revoked by the director, no new permit shall be issued to that agency for that project for a period of one year from the date of revocation. Such revocation shall not prohibit the issuance of a permit for the project to another public or private agency.

567—100.14(455B) Emergency response and remedial action plans.

100.14(1) *Purpose.* The purpose of this rule is to implement Iowa Code section 455B.306(7) “d” by providing the criteria for developing a detailed emergency response and remedial action plan (ERRAP) for permitted sanitary disposal projects. Each ERRAP shall include established provisions to minimize the possibility of fire, explosion, or any release to air, land, or water of pollutants that could threaten human health and the environment, and the identification of possible occurrences that may endanger human health and the environment.

100.14(2) *Applicability.* The requirements of this rule apply to the owners or operators of all sanitary disposal projects that are permitted pursuant to 567—Chapter 101, and any activity deemed necessary by the department to maintain an ERRAP as part of their permit. The ERRAP does not replace or supersede other regulatory requirements related to public health, safety or welfare.

100.14(3) *Submittal requirements.*

a. The owner or operator of a facility that is subject to this rule shall, at the time of application, incorporate a complete detailed ERRAP that meets the requirements set forth in this rule.

b. An updated ERRAP shall be submitted at the time of each permit renewal or permit reissuance application, and with any request for permit modification or significant change in facility operation that requires revision of the currently-approved ERRAP.

100.14(4) *Content.* The content of ERRAP documents shall be concise and readily usable as a reference manual by facility managers and operators during emergency conditions. The ERRAP document content shall address at least the following primary issues in detail, unless project conditions render the specific issue as not applicable. The rationale for exclusion of any issue areas that are determined not to be

applicable must be provided in either the body of the plan or as a supplement to facilitate department review. Additional ERRAP requirements unique to the facility shall be addressed, as applicable.

a. Facility information.

- (1) Permitted agency.
- (2) DNR permit number.
- (3) Facility description.
- (4) Responsible official and contact information.
- (5) Project location.
- (6) Site and environs map.

b. Regulatory requirements.

- (1) Iowa Code paragraph 455B.306(7) “d” criteria citation.
- (2) Reference to provisions of the permit.

c. Emergency conditions—response activities—remedial action for short-term (48 hours or less) and long-term (Over 48 hours) for the following:

(1) Failure of utilities that impede or prohibit operation of the facility, including but not limited to power/electricity and communications.

(2) Weather-related events that impede or prohibit operations of the facility, including but not limited to flooding and storms.

(3) Fire and explosions related to solid waste.

1. Solid waste fires, including landfill working face.
2. Hot loads.
3. Landfill gas.

(4) Solid waste spills and releases, including but not limited to waste materials, leachate and landfill gas.

(5) Mass movement of land and waste, including but not limited to earthquakes, slope failures, waste shifts or subsidence.

(6) Emergency notifications and reporting.

1. Federal agencies.
2. State agencies.
3. Local agencies.
4. News media.
5. Public and private facilities with special populations within five miles.
6. Emergency response agencies and contact information.
7. Reporting requirements and forms.

(7) Emergency waste management procedures.

1. Communications and public relations.
2. Temporary discontinuation of services—short- and long-term.
3. Facilities access and rerouting.
4. Waste acceptance.
5. Wastes in process.
6. Equipment.

(8) Emergency aid.

1. Responder contacts.
2. Medical services.
3. Contracts and agreements.

(9) ERRAP training requirements.

1. Training providers.
2. Employee orientation.
3. Annual training updates.
4. Training completion and record keeping.

100.14(5) The ERRAP shall be developed with the review and input of the local fire department and

local emergency management coordinator. Documentation shall be maintained that such review and input has been requested.

567—100.15(455B) Laboratory certification. Pursuant to Iowa Code section 455B.113, a laboratory certification program is required for laboratories performing analyses of samples which are required to be submitted to the department as a result of Iowa Code provisions, rules, operating permits, or administrative orders. The requirements of 567—Chapter 83 apply to all laboratories conducting analyses of solid waste parameters pursuant to Title VIII (solid waste management and disposal) of the commission's rules and general conditions of solid waste disposal. Any samples collected or testing conducted that is not part of the specific monitoring required by the department for regulatory purposes are excluded from the requirements of 567—Chapter 83. Consult 567—Chapter 83 to determine the most recent edition of test methods adopted by the department.

567—100.16(455B) Waivers. A request for a waiver to this chapter shall be submitted in writing pursuant to 561—Chapter 10.

These rules are intended to implement Iowa Code section 455B.304 and Iowa Code chapter 455D.

567—100.17 to 100.99 Reserved.