

**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 shall be considered to be incorporated verbatim in these rules.

*“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 MSWLF 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.

*“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.

*“CFR”* means Code of Federal Regulations.

*“Commission”* means the environmental protection commission.

*“Compost”* means organic material resulting from biological decomposition of waste which can be used as a soil conditioner or soil amendment.

*“Composting”* means the controlled, biological decomposition of selected solid organic waste materials under aerobic conditions resulting in an innocuous final product.

*“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.

*“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 all discarded sharp items derived from patient care in medical, research, or industrial facilities including glass vials containing materials defined as infectious, suture needles, hypodermic needles, scalpel blades, and Pasteur pipettes.

*“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 glass”* means any glass generated from CRTs.

*“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.

*“Department”* means the Iowa department of natural resources.

*“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. CRTs that are returned to the original owner are not “discarded.”

*“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. (NOTE: This definition includes the municipal airports in or near Iowa as follows: Moline, Illinois; Omaha, Nebraska; and Burlington, Cedar Rapids, Des Moines, Dubuque, Fort Dodge, Mason City, Ottumwa, Sioux City, and Waterloo, Iowa.)

*“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.

*“Firewood processing facilities”* means facilities which process or allow the public to process trees into firewood.

*“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 based on at least three soil borings.

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

*“High water table”* is the position of the water table which occurs in the spring in years of normal or 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.

*“Incineration”* means the processing and burning of 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, thereby creating a loose and divided soil texture.

*“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 rule 567—120.12(455B).

*“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.

*“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.

*“Local governments”* means those counties or municipalities using the sanitary disposal project.

*“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.

*“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.

*“Mean”* is the sum of all the measurements divided by the number of measurements.

*“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 Resource Conservation and Recovery Act (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 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 employee of the sanitary disposal project who is employed and assigned to operate the equipment used on the site.

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

*“Perched saturated zone”* is 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.

*“Plan participants”* means any individual, group, government or private entity that has direct involvement in an integrated solid waste management system.

*“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 five years effective March 1, 2011.

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

*“Processing facility”* means the site and equipment for the preliminary and incomplete disposal of solid waste, including but not limited to transfer, open burning, incomplete land disposal, incineration, composting, reduction, shredding and compression.

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

*“Public water supply system”* means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes: (1) any collection, treatment, storage, and distribution facilities under control of the supplier of water and used primarily in connection with such system, and (2) any collection (including wells) or pretreatment storage facilities not under such control which are used primarily in connection with such supply system. A public water supply system is either a “community water system” or a “noncommunity water system.”

a. *“Community water system”* means a public water supply system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

b. *“Noncommunity water system”* means a public water supply system that is not a community water system.

*“Recycling”* means any process by which waste or materials which otherwise become waste are collected, separated, or processed and reused or returned to use in the form of raw materials or products. Recycling includes, but is not limited to, the composting of yard waste which has been previously separated from other waste and collected by the sanitary facility, but does not include any form of energy recovery.

*“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.

“*Rubbish*” means nonputrescible solid waste consisting of combustible and noncombustible wastes, such as ashes, paper, cardboard, tin cans, yard clippings, wood, 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 disposal project*” is defined in Iowa Code section 455B.301.

“*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.

“*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. This definition does not apply to 567—Chapter 111.

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

“*Shelby tube*” is 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 or any other such waste having similar characteristics and effects.

“*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 section 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 November 16, 2016, 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 incinerator operator*” means an individual with active, daily, on-site responsibility for day-to-day operation of a department-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 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*” is 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.

“*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 deviation*” means the square root of the variance.

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

“*Storage coefficient*” is 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.

“*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.

“*Transfer station*” means a fixed or mobile intermediate solid waste disposal facility for transferring loads of solid waste, with or without reduction of volume, to another transportation unit.

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

“*Tree chipping facilities*” means facilities which chip trees and brush for the purpose of mulch production.

“*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 fill the annular space in a well from the bottom up.

“*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*” is the subsurface zone above the water table in which the interstitial spaces are only partially filled with water.

“*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.

*“Variance”* means the sum of the squared differences between the actual measurement and the mean divided by one less than the number of measurements.

*“Waste reduction”* means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium. Waste reduction includes, but is not limited to, home yard waste composting, which prevents yard waste from entering the waste stream.

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

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

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

This rule is intended to implement Iowa Code section 455B.304 and Iowa Code chapter 455D.  
[ARC 2756C, IAB 10/12/16, effective 11/16/16; ARC 6352C, IAB 6/15/22, effective 7/20/22; ARC 6982C, IAB 4/19/23, effective 5/24/23]