

Salt Lake County Health Department

Health Regulation

#1

**SOLID WASTE
MANAGEMENT AND PERMITTING**

**Adopted by the Salt Lake County Board of Health
September 7, 1989**

**Amended
October 5, 1989, July 7, 1994,
February 5, 1998, August 7, 2008
October 1, 2009
December 4, 2014
June 1, 2017
, 2026**

**Under Authority of
Utah Code Ann. §§ 26A-1-109(8), 26A-1-114, 26A-1-121(1)**

1. PURPOSE & APPLICABILITY OF REGULATION

- 1.1 The purpose of this Regulation is to regulate the management of solid waste in a way that will protect public health, safety, welfare, and the environment; will prevent the spread of disease, the creation of hazards and damage to property; and will minimize environmental pollution.
- 1.2 This Regulation applies to persons engaged in the handling, processing, collection, transporting or disposal of solid waste. This Regulation also applies to locations where solid waste is accumulated, stored, disposed of, or processed.

2. DEFINITIONS

For the purpose of this Regulation, the following phrases, terms, and words shall have the meanings given in this section:

- 2.1 “Active life” means the period of time that solid waste is routinely and regularly received at a solid waste management facility.
- 2.2 “Active area” as defined in Utah Administrative Code R315-301-2, means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being conducted.
- 2.3 “Agricultural waste” means manure or crop residues from various agricultural pursuits, including, but not limited to dairies and the raising of livestock and poultry.
- 2.4 “Airport” as defined in Utah Administrative Code R315-301-2, means public use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.
- 2.5 “Approved” means acceptable to the Department based on a determination of conformity with principles, practices, and generally recognized standards that protect public health.
- 2.6 “Aquifer” as defined in Utah Administrative Code R315-301-2, means a geologic formation, group of formations, or portion of a formation that contains sufficiently saturated permeable material to yield usable quantities of groundwater to wells or springs.
- 2.7 “Asbestos” means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, actinolite-tremolite, and Libby amphibole.

- 2.8 “Asbestos waste disposal site” means a landfill or landfill cell which is permitted by the Department to accept asbestos containing material.
- 2.9 “Asbestos-containing material” means any material containing more than 1% asbestos as determined using the method specified in 40 C.F.R. § 763, Appendix E to Subpart E. Polarized Light Microscopy (PLM). If the asbestos content is greater than a trace amount, but less than 10%, the asbestos concentration shall be determined by point counting using PLM or any other method approved by the Department.
- 2.10 “Asbestos waste” as defined in Utah Administrative Code R315-301-2, means friable asbestos, which is any material containing more than 1% asbestos as determined using the method specified in Appendix A, 40 CFR Part 763.1, 2001 ed., which is incorporated by reference, that if dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- 2.11 “Ash residue” means all the solid residues and entrained liquids resulting from the combustion of solid waste, including bottom ash, boiler ash, fly ash, and residues collected from air pollution control equipment.
- 2.12 “Automobile dismantling yard” means a lot or portion thereof, tract or parcel of land, structure or business, which is lawfully licensed to be used, maintained or operated for storing, collecting, keeping, buying, dismantling, or selling of vehicle parts.
- 2.13 “Background” or “Background concentration” as defined in Utah Administrative Code R315-301-2, means the concentration of a contaminant in groundwater upgradient or a lateral hydraulically equivalent point from a facility, practice, or activity, and which has not been affected by that facility, practice, or activity.
- 2.14 “Baseline water quality” means the chemical composition of groundwater or surface water prior to the placement or processing of solid waste at a solid waste management facility.
- 2.15 “Board” means the Salt Lake County Board of Health.
- 2.16 “Bulky waste” means large items of solid waste including, but not limited to, appliances, furniture, construction and demolition waste, motor vehicles, tires, trees, branches, and stumps.
- 2.17 “Cell” means a discrete engineered area of a landfill that is designed for the disposal of solid waste. A “cell” is a subpart of a landfill.
- 2.18 “Clay” means mineral soil particles less than 0.002 millimeters in diameter, or a soil material that contains 40% or more clay and either less than 45% sand or less than 40% silt.
- 2.19 “Clean fill” means uncontaminated rock, soil, gravel, and inert solid waste that is suitable to be utilized for engineering or grading purposes.

- 2.20 “Closed portion” means a discrete portion of a solid waste management facility that has been closed in accordance with the closure requirements of this Regulation.
- 2.21 “Combustion” means the thermal treatment of solid waste in a device that uses elevated temperatures as the primary method to change the chemical, physical, or biological character or composition of the waste.
- 2.22 “Commercial solid waste” as defined in Utah Administrative Code R315-301-2, means any type of solid waste generated by stores, offices, restaurants, warehouses, and other non-manufacturing commercial activities, excluding, household waste and industrial wastes.
- 2.23 “Compaction” means the volume reduction of material under load.
- 2.24 “Compost” means organic waste material that has biologically decomposed or is in the process of biologically decomposing under controlled conditions.
- 2.25 “Composting” as defined in Utah Administrative Code R315-301-2, means a method of solid waste management whereby the organic component of the waste stream is biologically decomposed under controlled aerobic conditions, at a temperature of 140 degrees Fahrenheit, 60 degrees Celsius, or higher, for at least part of each day of a consecutive seven day period, to a state where the end product or compost can be safely handled, stored, or applied to the land without adversely affecting human health or the environment.
- 2.26 “Composting facility” means a processing facility where composting occurs or where compost is produced as part of a composting process.
- 2.27 “Confined aquifer” means an aquifer containing groundwater under pressure greater than atmospheric pressure, from which water in a well typically rises to a level above the top of the aquifer.
- 2.28 “Construction and demolition landfill” means a landfill that is permitted by the Department to accept only construction and demolition waste.
- 2.29 “Construction and demolition waste” as defined in Utah Administrative Code R315-301-2, means solid waste from building materials, packaging, and rubble resulting from construction, remodeling, repair, abatement, rehabilitation, renovation, and demolition operations on pavements, houses, commercial buildings, and other structures, including waste from a very small quantity generator of hazardous waste, as defined by Utah Administrative Code R315-260-10, that may be generated by these operations.
- 2.29.1 This waste may include:
- (i) Concrete, bricks, and other masonry materials;
 - (ii) Soil and rock;
 - (iii) Waste asphalt;

- (iv) Rebar contained in concrete; and
- (v) Untreated wood, and tree stumps.

2.29.2 Construction or demolition waste does not include:

- (i) Friable asbestos;
- (ii) Treated wood; or
- (iii) Contaminated soils or tanks resulting from remediation or clean up at any release or spill.

2.30“Container” means any portable device in which a solid waste is stored, transported, treated, disposed of, or otherwise handled.

2.31“Contamination” means a condition resulting from any alteration of the physical, chemical, or biological properties of environmental media, including air, surface water, groundwater, and soil, or from the release or discharge of any liquid, gaseous, or solid substance into any waters of the state that creates a hazard or renders such waters harmful, detrimental, or injurious to public health, safety, welfare, or the environment, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, other domesticated animals, wild animals, birds, fish or other aquatic or plant life. Contamination results from the presence or introduction of a contaminant.

2.32“Contaminant” as defined in Utah Administrative Code R315-301-2, means any physical, chemical, biological, or radiological substance or matter in the water or soil, that is a result of human activity. A contaminant may cause or contribute to contamination as defined in this Regulation.

2.33“Cover material” means soil or other material approved by the Department that is used to cover compacted solid waste and is both free of objects that hinder compaction and is not conducive to vector harborage, feeding, or breeding.

2.34“Department” means the Salt Lake County Health Department, SLCoHD.

2.35“Demolition” as applied in this Regulation means “demolition project” as defined in Utah Administrative Code R307-801, Utah Asbestos Rule.

2.36“Director” means the Director of the Salt Lake County Health Department or his or her designated representative.

2.37“Discharge” means the accidental or intentional releasing, spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any solid waste or solid waste constituent, or wastewater, including leachate, into or on any air, land, or water.

2.38“Down-gradient well” means a well installed at a point lower in hydraulic potential relative to other points at a solid waste management facility.

- 2.39“Dust” means any particulate matter from soil, minerals, ash, or other material that is capable of being suspended in air.
- 2.40“Emissions” means the act of discharging into the atmosphere any air contaminant or effluent that contains or may contain an air contaminant, or the effluent so discharged into the atmosphere.
- 2.41“Etiologic agent” means any micro-organism, helminth, or virus that causes, or significantly contributes to causing increased morbidity or mortality in human beings.
- 2.42“Facility” as defined in Utah Administrative Code R315-301-2, means the contiguous land, structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of solid waste. A facility may consist of several treatment, storage, or disposal operational units, for example, one or more incinerators, landfills, container storage areas, or combinations of these.
- 2.43“Final cover” means a compacted layer of cover material, at least 24 inches thick, placed on all surfaces of a landfill where no additional solid waste will be deposited within one year. The upper six inches must consist of soil suitable to sustain plant growth. The lower portion must be composed of material that restricts infiltration and has a permeability less than or equal to that of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} cm/sec, whichever is less. The final cover must and will minimize infiltration through the closed landfill by incorporating an infiltration layer of at least 18 inches of earthen material, graded with a minimum 2% slope on the cap surface and a maximum 33% slope on the sides.
- 2.44“Floodplain” as defined in Utah Administrative Code R315-301-2, means land that has been, or may be, covered by flood water having a 1% chance of occurrence any given year. The flood is also referred to as the base flood or 100-year flood.
- 2.45“Freeboard” means the vertical distance between the lowest elevation of the top of a tank, surface impoundment, or dike and the highest level of the surface of the solid waste contained therein.
- 2.46“Garbage” as defined in Utah Administrative Code R315-301-2 means discarded animal and vegetable wastes resulting from the handling, preparing, cooking and consumption of food, and of a character and proportion as to be capable of attractive or providing food for vectors. Garbage does not include sewage and sewage sludge.
- 2.47“Generator” means any person that first creates or causes a product or material to become a solid waste or whose act or process produces a solid waste.
- 2.48“Groundwater” means subsurface water that is in the zone of saturation, including perched groundwater.
- 2.49“Groundwater table” means the naturally occurring surface of groundwater at which it is subjected to atmospheric pressure. “Groundwater table” does not include the potentiometric surface in a confined aquifer.

- 2.50“Hauler” means a person engaged in the off-site collection and transportation of solid waste by vehicle, and includes but is not limited to, waste haulers, liquid waste haulers, waste tire haulers, and infectious medical waste haulers.
- 2.51“Hazardous waste” means a solid waste, or a combination of solid wastes other than household waste which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or an incapacitating reversible illness, or may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- 2.52“Holocene fault” as defined in Utah Administrative Code R315-301-2, means a fracture or zone of fractures where rocks on one side of the fracture have been displaced with respect to those on the other side, which has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene, about 11,000 years ago, to the present.
- 2.53 “Household hazardous waste” means solid waste generated and discarded from any single or multiple dwelling unit, campsite, ranger station, or other residential source that is exempt from hazardous waste regulation under Utah Administrative Code R315-261, Utah Hazardous Waste Management Rules. The container size normally and reasonably associated with households and household activities is five gallons or less.
- 2.54“Hydraulic conductivity” means a measure of the capacity of a formation or material to transmit water. It is expressed as the volume of water that will move through a one-unit square area under a unit hydraulic gradient in a specified time.
- 2.55“Impermeable” means having a hydraulic conductivity equal to or less than 1×10^{-7} cm/sec as determined by field or laboratory permeability tests conducted in accordance with standard test methods that may be correlated with soil densification as determined by a compaction test.
- 2.56“Incineration” as defined in Utah Administrative Code R315-301-2, means a controlled thermal process that physically or chemically alters solid wastes into gas, liquid, or solid residues that are also regulated solid wastes. Incineration includes the thermal destruction of solid waste for energy recovery. Incineration does not include smelting operations where metals are reprocessed or the refining, processing, or burning of used oil for energy recovery. Incineration does not include smelting operations where metals are reprocessed or the refining, processing, or burning of used oil for energy recovery as described in Utah Administrative Code R315-15.
- 2.57“Incinerator” means a device used for the incineration of solid waste that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.
- 2.58“Industrial solid waste” means solid waste generated at a manufacturing or other industrial facility that is not a hazardous waste or that is a hazardous waste from a very small quantity generator of hazardous waste, as defined by Utah Administrative Code R315-260-10, generated by an industrial facility. Industrial solid waste includes waste from the following industries or resulting from the following manufacturing processes and associated activities:

- 2.58.1 Electric power generation;
- 2.58.2 Fertilizer or agricultural chemical industries;
- 2.58.3 Food and related products or by-products industries;
- 2.58.4 Inorganic chemical industries;
- 2.58.5 Iron and steel manufacturing;
- 2.58.6 Leather and leather product industries;
- 2.58.7 Nonferrous metals manufacturing or foundry industries;
- 2.58.8 Organic chemical industries;
- 2.58.9 Plastics and resins manufacturing;
- 2.58.10 Pulp and paper industry;
- 2.58.11 Rubber and miscellaneous plastic product industries;
- 2.58.12 Stone, glass, clay, and concrete product industries;
- 2.58.13 Textile manufacturing;
- 2.58.14 Transportation equipment manufacturing; and
- 2.58.15 Water treatment industries.

2.58.16 This term does not include mining waste, oil and gas waste, or other waste excluded by Utah Code Annotated §19-6-109(19).

2.59 “Industrial waste landfill” means a landfill permitted under Section 4.1.1(i)(b)(i) of this Regulation that accepts only non-hazardous industrial waste.

2.60 “Inert waste” means noncombustible, nonhazardous solid waste that retains its physical and chemical structure, under expected conditions of disposal, and that exhibits resistance to biological or chemical change.

2.61 “Infectious medical waste” means solid waste that contains pathogens of sufficient virulence and quantity that exposure of a susceptible host to the waste could result in an infectious disease. “Infectious medical waste” includes but is not limited to, the following:

- 2.61.1 Biologic laboratory waste, including cultures of etiologic agents, that pose a substantial threat to health due to their volume or virulence;

- 2.61.2 Pathologic specimens, including human or animal tissues, blood elements, excreta, and secretions that contain etiologic agents, and attendant disposable fomites;
 - 2.61.3 Surgical specimens, including human or animal parts and tissues removed surgically or at autopsy that, in the opinion of the attending physician or veterinarian, contain etiologic agents, or attendant disposable fomites;
 - 2.61.4 Equipment, instruments, utensils, and other disposable materials that are likely to transmit etiologic agents from the rooms of humans or the enclosures of animals that have been isolated because of suspected or diagnosed communicable disease;
 - 2.61.5 Human dialysis waste materials including arterial lines and dialysate membranes;
 - 2.61.6 Carcasses of animals infected with etiologic agents that may present a substantial hazard to public health if improperly managed;
 - 2.61.7 Medical sharps that are to be disposed of, regardless of whether they have been used for injections or body-fluid extractions;
 - 2.61.8 Chemotherapy waste, including all disposable materials that have come in contact with all cytotoxic or antineoplastic agents during the preparation, handling, and administration of such agents. Such waste includes, but is not limited to, masks, gloves, gowns, empty intravenous tubing, bags, vials, and other contaminated materials. The waste must first be classified as empty and of such quantity that it is not subject to state or federal waste-management regulations prior to being handled as infectious medical waste; and any other infectious medical waste that may present a significant danger of infection because it can reasonably be expected to be contaminated with etiologic agents.
- 2.62 “Infectious medical waste generator” means any person or entity that generates infectious medical waste, including any hospitals; psychiatric hospitals; home health agencies; hospices; skilled nursing facilities; intermediate care facilities; intermediate care facilities for individuals with intellectual disabilities, residential health care facilities; maternity homes or birthing centers; free standing ambulatory surgical centers; facilities owned or operated by health maintenance organizations; end-stage renal disease treatment centers including free standing hemodialysis units; rehabilitation hospitals; alcohol and chemical dependency units; infirmaries; emergency care clinics; employee health clinics; blood banks and plasma centers; biomedical laboratories; ambulance and paramedic services; veterinary clinics; funeral homes; or any other health care facility designated by the Department. “Infectious medical waste generator” does not include a business or single-family residence that generates less than 25 pounds of infectious medical waste in a calendar month.
- 2.63 “Infectious medical waste hauler” means any person or entity that transports at least 50 pounds of infectious medical waste in a calendar month.

- 2.64“Junk” means old, used, worn, or discarded metal, glass, paper, plastic or other material that has served its original intended purpose and is not destined to be recycled.
- 2.65“Landfill” as defined in Utah Administrative Code R315-301-2, means a solid waste management or disposal facility where solid waste is or has been placed in or on the land and that is not a landspreading facility or surface impoundment.
- 2.66“Landspreading facility” means any processing facility, or unit within a processing facility, where solid waste is applied onto or incorporated into the soil surface for the purpose of biodegradation.
- 2.67“Leachate” as defined in Utah Administrative Code R315-301-2 means any liquid that has passed through, contacted, or emerged from solid waste and that contains dissolved, suspended, miscible, or immiscible materials, chemicals, or microbial waste products removed from the solid waste.
- 2.68“Leachate recirculation” means the recycling or reintroduction of leachate into a landfill.
- 2.69“Lift” means the vertical thickness of a compacted layer of solid waste and the cover material immediately above it.
- 2.70“Liner” means any continuous layer of natural or man-made materials, placed beneath or on the sides of a landfill, cell, or surface impoundment, that is designed to restrict the downward or lateral escape of solid waste or its constituents.
- 2.71“Liquid waste” means any solid waste that contains “free liquids” as determined by Method 9095 (Paint Filter Liquids Test) described in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods Compendium* (EPA Publication SW-846, latest edition). “Liquid waste” does not include infectious medical waste or hazardous waste.
- 2.72“Liquid waste hauler” means any person or entity that operates a vehicle or trailer equipped with a wastewater tank and capable of hauling sludge, liquid waste, semi-liquid waste, or used oil.
- 2.73“Litter” means any uncontained or improperly disposed quantity of paper, metal, plastic, glass, or other solid waste.
- 2.74“Littering” means the throwing, discharging, dropping, placing, depositing, or sweeping of litter or other solid waste on any premises or property other than in an approved storage container or disposal site.
- 2.75“Lower explosive limit (LEL)” defined in Utah Administrative Code R315-301-2 means the lowest percentage by volume of a mixture of flammable gases that can propagate a flame in air at 77 degrees Fahrenheit (25 degrees Celsius) and atmospheric pressure.
- 2.76“Mercury-containing lights” means any lighting labeled or known to contain mercury, including but not limited to fluorescent tubes, compact fluorescent lights (CFLs), high-intensity discharge (HID) lamps such as high and low-pressure sodium lamps, mercury vapor lamps, metal halide lamps, ultraviolet (UV) and germicidal lamps and neon lights.

- 2.77“Mobile cleaner” means any person, business, or part of a business that uses mobile equipment to perform carpet cleaning, power washing, or other similar services and that generates liquid waste as a result of those activities.
- 2.78“Monofill” means a landfill or landfill cell that is used for the disposal of only one type of solid waste.
- 2.79“Mulch” means vegetation residues or other suitable materials, as approved by the Department, that are applied to the soil surface to aid in soil stabilization and moisture conservation and to create conditions suitable for germination and growth. This definition is consistent with Utah Administrative Code R645-100-200 (*Natural Resources; Oil, Gas, and Mining; Coal*).
- 2.80“Mulching” means a method of solid waste management in which vegetation residues or other suitable materials from the waste stream are processed into a form that can be safely handled, stored, or applied to the land without adversely affecting human health or the environment.
- 2.81“Municipality” means a town, city, or designated agency thereof, as defined in Utah Code Annotated § 10-1-104(5).
- 2.82“Municipal solid waste” as defined in Utah Administrative Code R315-301-2, means household waste, nonhazardous commercial solid waste, and nonhazardous sludge.
- 2.83 “Municipal waste landfill” means a landfill or landfill cell permitted pursuant to Section 4.1.1(i)(b)(i) of this Regulation to receive solid waste and that may also receive commercial waste, construction and demolition waste, or other wastes approved by the Department.
- 2.84“Open burning” means any fire whose products of combustion are emitted directly into the air without passing through a stack or chimney.
- 2.85“Open dump” means any location where solid waste has been accepted, stored, or disposed of without approval or authorization from the Department.
- 2.86“Operator” means any person or entity that owns, leases, operates or manages a solid waste management facility or a hauler operation.
- 2.87“Owner” means any person or entity that holds legal title to, or has possession, charge, care, or control of, a solid waste management facility, hauler operation, or other property. The term includes a legal or equitable owner, lessor, or lessee, agent, or any person acting as a representative of the owner, such as a trustee, executor, or administrator.
- 2.88“Partial closure” means the closure of a specific portion of a solid waste management facility in accordance with the closure requirements of this Regulation. “Partial closure” may include the closure of a trench, unit operation, cell, or pit, while other parts of the facility remain in operation or may be operated in the future.

- 2.89“Permit” means a written authorization issued in accordance with this Regulation.
- 2.90“Person” means any individual; public or private corporation and its officers; partnership; association; firm; trustee; executor of an estate; the State, its departments, institutions, bureaus, or agencies; any municipal corporation; county; city; political subdivision; or any legal entity recognized by law.
- 2.91“Processing facility” means a fixed or mobile solid waste management facility where solid waste is stored, classified, consolidated, baled, shredded, sorted, composted, blended, solidified, salvaged, treated, or otherwise handled before final disposal. “Processing facilities” include, but are not limited to, incinerators; transfer stations; landspreading facilities; composting or mulching facilities surface impoundments; used oil storage, reprocessing, or refining facilities; recycling facilities, pyrolysis plants; reclamation facilities; resource recovery facilities; and waste-tire storage facilities. “Processing facility” does not include scrap metal processing facilities and automobile dismantling yards.
- 2.92“Putrescible waste” means solid waste that contains organic matter capable of being decomposed by microorganisms and that, because of its character or proportion may attract or provide food for vectors including birds and mammals.
- 2.93“Pyrolysis” means the chemical decomposition of material by heat in an oxygen-deficient atmosphere.
- 2.94“Pyrolysis plant” means a processing facility where pyrolysis occurs.
- 2.95“Quality assurance” means the system of standards and procedures used to ensure a product, process, or facility meets or exceeds required performance criteria, together with documentation verifying the results obtained. Quality assurance includes quality control.
- 2.96“Quality control” means the verification and maintenance of the characteristics of an item or service to ensure compliance with contractual and regulatory requirements. “Quality control” includes actions taken before construction, installation, sampling, analysis, cleaning, removal, or other remedial activity to ensure that materials and workmanship comply with the Department-approved quality control plan, engineering plans, reports, and specifications.
- 2.97“Recycling” means extracting valuable materials from the waste stream and transforming or remanufacturing them into usable materials that have a demonstrated or potential market.
- 2.97.1 “Recycling” does not include processes that generate a volume of material so large that no market exists for the material.
- 2.97.2 Any part of the waste stream entering a recycling facility and subsequently returning to a waste stream or being otherwise disposed has the designation of original waste.

- 2.97.3 “Recycling” includes the substitution of non-hazardous solid waste fuels for conventional fuels, such as coal, natural gas, and petroleum products, to generate the heat necessary to manufacture a product.
- 2.98 “Recycling facility” means a processing facility designed and operated to perform recycling methods on one or more solid wastes and return processed materials to market.
- 2.99 “Regulated Asbestos-Containing Material (RACM)” means friable asbestos-containing material (ACM); Category I non-friable ACM that has become friable; Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or Category II non-friable ACM that has a high probability of becoming, or has become, crumbled, pulverized, or reduced to powder by the forces expected to act on the material during demolition or renovation project operations.
- 2.100 “Remediation” means corrective action taken in response to a discharge or threatened discharge of a contaminant into the environment.
- 2.101 “Residue” means any solid waste or product remaining after processing occurs that cannot be recycled or returned to market by the processing facility. Residue shall be managed or disposed of at a landfill or other processing facility permitted to accept that waste.
- 2.102 “Resource recovery” means the processing of solid waste to produce materials or energy that can be used or reused in manufacturing, agriculture, power or heat production, or any other processes.
- 2.103 “Resource recovery facility” means a processing facility designed and operated to separate or process solid or liquid waste into usable materials, including, but not limited to, fuel, heat, or other energy.
- 2.104 “Run-off” means any water, leachate, or other liquid that drains over land from any part of a solid waste management facility.
- 2.105 “Run-on” means any rainwater, leachate, or other liquid that drains over land onto the active area of a facility.
- 2.106 “Salvaging” means the controlled removal or handling of junk or other waste material for processing, recycling, or other beneficial use.
- 2.107 “Scavenge” means the unauthorized removal of solid waste from a solid waste management facility.
- 2.108 “Scrap metal processing facility” means a lot, tract of land, structure, or business used, maintained, or operated for the processing or resale of iron, steel, or nonferrous metals, and whose principal product is scrap iron, steel, or nonferrous metal for sale, reuse, melting, smelting, or rolling.

- 2.109 “Seismic zone” means an area with a 10% probability that the maximum horizontal acceleration in hard rock, expressed as a percentage of the earth’s gravitational pull (g), will exceed 0.10g in 250 years.
- 2.110 “Sewage” means human or animal waste carried by water or other liquid from a dwelling, business, institution, industrial establishment, or agricultural, recreational, or other source, including but not limited to wastes from sewer systems, septic tanks, privy vaults, and cesspools, and any groundwater, surface water, or storm water that may be mixed with these wastes.
- 2.111 “Sharps” as defined in Utah Administrative Code R315-301-2, means any discarded or contaminated article or instrument from a health facility that may cause puncture or cuts. This waste may include needles, syringes, blades, needles with attached tubing, pipettes, pasteurs, broken glass, and blood vials.
- 2.112 “Sludge” means any solid, semi-solid, or liquid waste, including grit and screenings generated from:
- 2.112.1 Municipal, commercial, or industrial wastewater treatment plants;
 - 2.112.2 Water supply treatment plants;
 - 2.112.3 Car wash facilities; or
 - 2.112.4 Any other waste having similar characteristics.
- 2.113 “Solid waste” means garbage, trash, junk, asbestos or asbestos-containing material, hazardous waste, infectious medical waste, industrial waste, inert waste, construction and demolition waste, electronic waste, dead animals, sludge, liquid or semi-liquid waste, leachate, used oil, other spent or discarded materials, or materials stored or accumulated for the purpose of discarding; materials that have served their original intended purpose; or waste material resulting from industrial manufacturing, mining, commercial, agricultural, household, institutional, recreational, or other activities. “Solid waste” does not include solid or dissolved materials in domestic sewage, irrigation return flows, or discharges for which a permit is required under state or federal regulations.
- 2.114 “Solid waste disturbance” means any act or omission that causes solid waste to endanger or injure the health of any person or the environment.
- 2.115 “Solid waste management facility” means any place, site, or facility permitted to engage in solid-waste collection, receiving, transfer, storage, recycling, treatment, or disposal, including but not limited to processing facilities and landfills. Scrap-metal processing facilities are not solid-waste management facilities for the purposes of this Regulation.
- 2.116 “Special waste” means discarded solid waste that may require special handling or other solid waste that may pose a threat to public safety, human health, or the environment.
- 2.116.1 Special waste may include:

- (i) Ash;
- (ii) Automobile bodies;
- (iii) Furniture and appliances;
- (iv) Infectious waste;
- (v) Waste tires;
- (vi) Dead animals;
- (vii) Asbestos;
- (viii) Waste exempt from the hazardous waste rules under Utah Administrative Code R315-261-4;
- (ix) Very small quantity generator hazardous waste as defined by Utah Administrative Code R315-260-10
- (x) Waste containing PCBs;
- (xi) Petroleum contaminated soils;
- (xii) Waste asphalt; and
- (xiii) Sludge.

2.116.2 Special waste shall be handled and disposed according to the requirements of Utah Administrative Code R315-315.

2.117 “Surface impoundment” means a processing facility, or part of one, that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) and designed to hold solid waste in semi-solid or liquid form and is not an injection well. “Surface impoundment” includes, but is not limited to, holding, storage, settling, blending, or aeration pits, ponds, and lagoons.

2.118 “Surface water” means lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, inlets, canals, and all other bodies of surface water, natural or artificial, fresh or salt, public or private.

2.119 “Tank” means a stationary device designed to contain an accumulation of solid waste, liquid, or leachate, and constructed primarily of non-earthen materials such as wood, concrete, steel, or plastic that provide structural support.

2.120 “Tire” means a pneumatic rubber covering designed to encircle the wheel of a vehicle used to transport or draw a person or property upon any surface. This definition excludes tires from devices moved exclusively by human power.

- 2.121 “Tire shreddings” means a tire or waste tire that has been reduced in size through mechanical or other Department-approved means so that the greatest dimension of at least 60% by weight of the pieces is no more than 6 inches, and the greatest dimension of any piece is no more than 12 inches.
- 2.122 “Transfer station” means a processing facility where solid waste is transferred for transportation to another solid-waste management facility for treatment or disposal.
- 2.123 “Treatment” means any method, technique, or process designed to change the physical, chemical, or biological character or composition of any solid waste or part of it; to recover energy or materials from it; or to render it safer to transport, store, or dispose of; or to make it amenable for recovery or storage; or to reduce its volume.
- 2.124 “Unauthorized solid waste” means solid waste that a hauler or solid-waste management facility is not permitted to accept for transport, processing, or disposal.
- 2.125 “Universal waste” subject to the requirement of Utah Administrative Code R315-261-9, and regulated under R315-273, means batteries, pesticides, mercury-containing equipment, lamps, aerosol cans, and antifreeze.
- 2.126 “Unsaturated zone” means a hydrologic zone in which the interstices between particles of geologic material, or the joints, fractures, or solution channels in a consolidated rock unit, are not filled with water.
- 2.127 “Upgradient well” means a well installed at a point having a higher in hydraulic potential than other points at a solid-waste management facility.
- 2.128 “Used oil” as defined in 40 CFR 279.1, means any oil refined from crude oil, or any synthetic oil, that has been used and, as a result of that use, is contaminated by physical or chemical impurities.
- 2.129 “Vector” as defined in Utah Administrative Code R315-301-2, means a living animal including insect or other arthropod that is capable of transmitting an infectious disease from one organism to another.
- 2.130 “Vehicle” means any motor vehicle, trailer, water vessel, railroad car, or airplane.
- 2.131 “Waste hauler” means a hauler who collects, hauls, or transports garbage, trash, junk, asbestos, construction or demolition waste, or dead animals. “Waste hauler” does not include a business that collects or transports solid waste only as an incidental part of its primary business.
- 2.132 “Waste tire” means any tire that has been discarded or has ceased to serve the purpose for which it was originally manufactured or intended because of wear, damage, or imperfections.
- 2.133 “Waste tire transporter” as defined in Utah Code Annotated §19-6-803, means a person engaged in picking up or transporting, at one time, more than 10 whole waste

tires or the equivalent amount of material derived from waste tires generated in Utah for the purpose of storage, processing, or disposal and includes:

2.133.1 A person engaged in the business of collecting, hauling, or transporting waste tires or who performs these functions for another person, except as provided in Section 2.133.2.

2.133.2 “Waste tire transporter” does not include:

- (i) A person transporting waste tires generated solely by:
 - a. That person’s personal vehicles;
 - b. A commercial vehicle fleet owner or operated by that person or that person’s employer;
 - c. Vehicles sold, leased, or purchased by a motor vehicle dealership owner or operated by that person or that person’s employer; or
 - d. A retail tire business owner or operated by that person or that person’s employer;
- (ii) A solid waste collector operating under a license issued by a unit of local government as defined in Utah Code §63M-5-103, or a local health department;
- (iii) A recycler of waste tires;
- (iv) A person transporting tires by rail as a common carrier subject to federal regulation; or
- (v) A person transporting processed or chipped tires.

2.134 “Waste tire storage facility” as defined in Utah Administrative Code R315-301-2, means any site where more than 1,000 waste tires or the byproduct of 1,000 tires or waste tires are stored on the ground.

2.134.1 A waste-tire storage facility includes:

- (i) whole waste tires used as a fence;
- (ii) whole waste tires used as a windbreak; and
- (iii) waste-tire generators where more than 1,000 waste tires are held.

2.134.2 A waste-tire storage facility does not include:

- (i) a site where waste tires are stored exclusively in buildings or in trailers;

- (ii) site of a registered tire recycler or a processor for a registered tire recycler, if whole waste tires are stored for 5 or fewer days;
- (iii) a permitted solid waste disposal facility that stores whole tires in piles for no longer than one year;
- (iv) a staging area where tires are temporarily placed on the ground, not stored, to accommodate activities such as sorting, assembling, or loading or unloading trucks.
- (v) a site where waste tires or material derived from waste tires are stored for 5 or fewer days and are used for ballast to maintain covers on agricultural materials or construction sites, or are to be recycled or applied to a beneficial use.

2.135 “Wellhead protection area” means the surface and subsurface area surrounding a well or well-field that supplies a private or public water system through which contaminants could pass and eventually reach the water well or well-field.

2.136 “Wetlands” means areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. “Wetlands” generally includes swamps, marshes, bogs, and similar areas.

2.137 “Working face” means the portion of a landfill where solid waste is discharged or placed and compacted before placement of cover material.

3. GENERAL PROVISIONS

3.1 Jurisdiction of the Department.

3.1.1 This Regulation is promulgated by the Board as authorized by Utah Code § 26A-1-121(1) and Salt Lake County Code of Ordinances 9.04.

3.1.2 The Department is empowered to enforce this Regulation in all incorporated and unincorporated areas served by the Department as authorized by Utah Code § 26A-1-114(1)(a) and Salt Lake County Code of Ordinances 9.04.

3.2 Except as otherwise provided, it shall be unlawful for any person not to comply with any regulation promulgated by the Department, unless granted an express variance by the Board.

3.3 Compliance with this Regulation does not constitute a defense for any person charged with an environmental crime or violation of any other local, state, or federal law.

3.4 Legal action taken by the Department under this Regulation does not preclude prosecution for an environmental crime that may have been committed or a violation of any other local, state, or federal law.

- 3.5 Except as provided below, nothing in this Regulation affects or limits any obligation or liability imposed by another Department regulation, a Salt Lake County ordinance, an ordinance of a municipality located within Salt Lake County, or applicable state or federal law, including common law. Departmental regulations supersede existing local and county standards, regulations, and ordinances pertaining to similar subject matter, as provided in Utah Code § 26A-1-121(1)(b)(i).
- 3.6 Verbal or contractual obligations shall not diminish or remove the owner's or other responsible person's obligation to comply with this Regulation.
- 3.7 **Severance.** If any section, sentence, clause, or phrase of this Regulation is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Regulation.
- 3.8 **Prohibited Acts in General:** Except as allowed pursuant to this Regulation, it shall be unlawful for any person:
- 3.8.1 To dispose of more than 12 tires at one time. No person shall dispose of waste tires except at a solid waste management facility permitted to accept waste tires;
 - 3.8.2 To salvage without approval from the Department or to scavenge at a solid waste management facility;
 - 3.8.3 To dispose of solid waste anywhere other than a facility permitted, as applicable, by the Department, the State of Utah, or the United States to accept that type of waste;
 - 3.8.4 To accept solid waste for processing or disposal except at a solid waste management facility that is permitted by the Department, the State of Utah, and/or the United States of America, if applicable, to accept that type of waste;
 - 3.8.5 To create or operate an open dump, or to allow an open dump to exist;
 - 3.8.6 To create, cause, or allow any condition that promotes insect or rodent propagation, facilitates disease transmission, is unsanitary, or otherwise constitutes a public health or safety hazard;
 - 3.8.7 To accept, process, or dispose of hot or smoldering waste or any waste that may pose a hazard to solid waste haulers, their vehicles, or solid waste management facility employees;
 - 3.8.8 To feed domestic animals at a solid waste management facility;
 - 3.8.9 To "open burn" solid waste without Department approval or in violation of Utah Administrative Code R307-202, Emission Standards: General Burning;
 - 3.8.10 To accumulate, litter, store, collect, transport, transfer, treat, process, utilize, reclaim, recover, recycle, incinerate, or dispose of solid waste in a manner that

creates a public health or safety hazard;

- 3.8.11 To fail to keep required records of the types or amounts of solid waste transported, treated, stored, or disposed of, and the name and location of the solid waste management facility or to falsify any such record;
- 3.8.12 To cause a discharge of solid waste or contaminants into any water or waterway within Salt Lake County, including wetlands, in violation of any applicable requirement of the Utah Water Quality Act, Utah Code § 19-5-101 et seq.; the Utah Pollutant Discharge Elimination System (UPDES); the Salt Lake County Health Department Wastewater Regulation #13; or any area-wide or statewide water quality management plan approved under Section 208 of the federal Clean Water Act, as amended;
- 3.8.13 To construct a structure on an active or closed landfill or to use property that is or was used as a landfill for any purpose without first obtaining written Department approval;

3.9 General Solid Waste Management Facility Siting Standards. A new solid waste management facility shall not be located in, and an existing solid waste management facility shall not be expanded into, any of the following areas:

- 3.9.1 An area likely to be affected by a landslide or mudflow unless it is demonstrated to the Department that engineering measures have been incorporated into the facility design to ensure the stability of the site and the waste it contains.
- 3.9.2 A wetland, unless it is demonstrated to the Department that:
 - (i) No alternative exists that would have less environmental impact;
 - (ii) The facility will not cause or contribute to a violation of any federal, state, or local regulation or water quality standard;
 - (iii) The facility will not jeopardize the continued existence of any endangered or threatened species; and
 - (iv) The appropriate governmental agencies have determined that the facility will not result in significant destruction or degradation of wetlands.
- 3.9.3 An area within 200 feet of a Holocene fault, unless it is demonstrated to the Department that a setback of less than 200 feet will prevent damage to the structural integrity of the facility and protect human health and the environment.
- 3.9.4 A seismic zone, unless it is demonstrated to the Department that engineering measures have been incorporated into the facility design to ensure containment.
- 3.9.5 A one-hundred year floodplain, unless engineering measures have been incorporated into the facility design to divert floodwaters from the site.

- 3.9.6 An area within 10,000 feet of an airport runway used by turbojet aircraft or within 5,000 feet of an airport runway used solely by piston-type aircraft, unless it is demonstrated to the Department that the facility will not create a bird hazard to aircraft.
- 3.9.7 Public land designated as a watershed area for municipal drinking water purposes or as another drinking water source protection zone.
- 3.9.8 An area within 1,500 feet of a wellhead or spring protection area, unless it is demonstrated to the Department that the site is outside the zone of contribution of the well, well field, or spring.
- 3.9.9 A dam failure area.
- 3.9.10 An area within one-quarter mile of an existing residential area, school, place of worship, hospital, historic structure, or other incompatible permanent dwelling or structure, unless it is demonstrated to the Department that the facility will not adversely affect public health.
- 3.9.11 Any other area in which the construction or expansion of a solid waste management facility is prohibited by state or federal law or regulation.

4. SOLID WASTE PROVISIONS

4.1 Solid Waste Management Facilities.

4.1.1 Permit and Approval Requirements and Application Process.

- (i) **Permits and Approval.** No person shall construct or operate a solid waste management facility without first obtaining a valid permit from the Department in accordance with this section. A solid waste management facility shall maintain a valid permit throughout its construction, active life, and closure period. Any modification to an existing solid waste management facility requires Department approval. All permits and approval orders required by the Utah Department of Environmental Quality or any other regulatory agency shall be obtained before the Department issues a permit for the facility.

a. Processing Facility Permits.

- i. **Processing Facility Permit for Municipal or Industrial Waste.** A Processing Facility Permit for Municipal or Industrial Waste is required for a processing facility that accepts municipal waste or non-hazardous industrial waste and transfers the waste for disposal.
- ii. **Construction and Demolition Processing Facility Permit.** A Construction and Demolition Processing Facility Permit is required for a processing facility that accepts only construction and demolition waste and transfers the waste for disposal.

- iii. **Liquid Waste Processing Facility Permit.** A Liquid Waste Processing Facility Permit is required for a processing facility that blends or mixes liquid or semi-liquid waste, or that transfers liquid waste for processing or disposal at a solid waste management facility located outside Salt Lake County.
 - 1. A processing facility that processes used oil and returns it to market shall obtain any required permit from the Utah Division of Waste Management and Radiation Control.
 - iv. **Waste Tire Storage Facility Permit.** A Waste Tire Storage Facility Permit is required for a facility that stores waste tires.
 - v. **Infectious Medical Waste Facility Permit for Storage or Transfer.** An Infectious Medical Waste Facility Permit for Storage or Transfer is required for a processing facility that stores or transfers infectious medical waste.
 - vi. **Infectious Medical Waste Treatment Facility Permit.** An Infectious Medical Waste Treatment Facility Permit is required for a processing facility that accepts infectious medical waste from off-site generators for incineration or other treatment.
 - vii. **Recycling Facility Permit.** Recycling Facility Permit is required for a processing facility designed and operated to perform recycling methods on one or more solid wastes and return processed materials to market.
- b. **Landfill Permits:**
 - i. **Landfill Permit for Municipal or Industrial Waste.** A Landfill Permit for Municipal or Industrial Waste is required for a landfill that accepts municipal waste or non-hazardous industrial waste.
 - ii. **Construction and Demolition Landfill Permit.** A Construction and Demolition Landfill Permit is required for a landfill that accepts only construction and demolition waste.
 - iii. **Monofill Permit.** A Monofill Permit is required for a monofill that accepts solid waste generated by a person other than the monofill's owner or operator.
 - iv. **Private Landfill Permit.** A Private Landfill Permit is required for a landfill that accepts only solid waste generated by the facility's owner or operator.
- (ii) **Exemptions.** The following facilities, persons, activities, and waste streams are exempt from the permit, approval and financial assurance requirements of this section and the fee requirements in Section 5:

- a. Solid waste management facilities permitted by a state or federal agency to accept hazardous waste, except any portion or cell of such a facility that receives exclusively non-hazardous solid waste.
- b. Solid waste regulated by a state or federal agency that consists of:
 - i. Waste generated from the extraction, benefaction, or process of ores or minerals, including phosphate rock and overburden from uranium ore mining; or
 - ii. Drilling fluids, produced waters, or other waste associated with the exportation, development, or production of crude oil, natural gas, or geothermal energy.
- c. Asphalt or concrete recycling facilities that operate at a mine or quarry site, provided that the facilities maintain and provide proof of:
 - i. A permit and financial assurance for reclamation of the property after closure, as required by the Utah Division of Oil, Gas, and Mining, or equivalent financial assurance required by another local, state, or federal regulatory agency;
 - ii. A Utah Division of Air Quality dust control approval order or permit;
 - iii. A Utah Division of Water Quality Pollutant Discharge and Elimination System (UPDES) permit and Storm Water Pollution Prevention Plan (SWPPP), if required by UDWQ;
 - iv. Mine Safety and Health Administration safety and spill response measures;
 - v. A Plan of Operation approved by the Utah Division of Waste Management and Radiation Control approved Plan of Operation; and
 - vi. Implementation of a “rejected load plan” with instructions for the facility owner or operator to provide proper disposal guidance to patrons who bring unapproved material(s) to the facility.
- d. Publicly owned wastewater treatment facilities permitted by the State of Utah or the federal government.
- e. Temporary containers used to collect newspapers, aluminum, or similar materials that are completely enclosed except for a deposit opening, provided that each container does not exceed 30 cubic yards and the deposited materials are removed regularly.

- f. Recycling facilities that recover pre-separated recyclable materials provided that:
 - i. The facility generates less than one ton of residue per day;
 - ii. The facility does not generate hazardous or putrescible waste;
 - iii. At least 50% of the material present at the facility at the beginning of a calendar year is recycled before the end of that year;
 - iv. All materials deposited for recycling are recycled within two years;
 - v. The facility is designed and operated to manage solid waste without creating litter or a solid waste disturbance; and
 - vi. The facility separates, handles, contains, discharges, and disposes of all hazardous and universal waste in accordance with applicable state and federal laws, rules, and guidelines.
- g. Licensed automobile dismantling yards and scrap metal processors.
- h. Clean fill used for grading, provided the material is uncontaminated and used in compliance with all applicable local, state, and federal requirements.
- i. Riverbank and stream bank stabilization operations, provided that:
 - i. Only clean fill is used; and
 - ii. The stabilization is approved or permitted by all applicable county, state, and federal agencies.
- j. Crematoriums and cemeteries operated in accordance with industry standards.
- k. Incinerators, steam sterilizers, or autoclaves located at the site of an infectious medical waste generator that process only infectious medical waste generated on site.
- l. Generators of waste tires, if the tires are generated through the sale of new tires, or retreading operations, or as an incidental part of the generator's business and fewer than 1,000 waste tires are stored at the facility or premises at any time.
- m. Non-hazardous agricultural generated and disposed of on the premises, provided that the waste is managed in accordance with this Regulation and is not disposed of within any prohibited areas identified in Section 3.9.

(iii) **Permit Application Process.**

- a. **Application Due Dates.** Permit applicants shall submit all documentation and fees required by this subsection within the following time periods:
 - i. For a permit to construct a new solid waste management facility, at least 90 calendar days before construction begins.
 - ii. For a permit to operate a new or existing solid waste management facility, at least 30 calendar days before operation begins.
- b. **Fees.** Before a permit required under this section may be issued, the applicant shall pay the applicable application fee specified in Section 5.2.1 of this Regulation.
- c. **Zoning Approval.** A permit applicant shall submit proof of planning or zoning approval for the facility from the planning or zoning authority having jurisdiction over the facility's location.
- d. **Plans and Specifications.** The following plans and specifications shall be submitted to the Department for review and approval:
 - i. **Processing Facilities.** An applicant for a processing facility permit under 4.1.1(i)(a) shall submit a report pursuant to Section 4.1.2(i) and a Closure and Post-Closure Plan pursuant to Section 4.1.2(ii).
 - ii. **Landfills.** An applicant for a landfill permit under 4.1.1(i)(b) shall submit a report pursuant to Section 4.1.3(i) and a Closure and Post-Closure Plan pursuant to Section 4.1.3(ii).
- e. **Public Notice.** Before a permit may be issued, the applicant shall submit proof that notice of the proposed solid waste management facility was published in accordance with this section. The notice shall be published in a newspaper of general circulation in the State of Utah for at least three consecutive days and shall include:
 - i. The address of the proposed solid waste management facility;
 - ii. A statement that an application has been submitted to the Department to construct or operate a solid waste management facility at that location;
 - iii. The date the application was submitted to the Department.
 - iv. A reasonably specific description of the activities proposed at the facility;

- v. A statement that the facility's plans and specifications may be reviewed by the public at the Salt Lake County Health Department, Division of Environmental Health, located at 788 E. Woodoak Lane in Murray, Utah, 84107; and
 - vi. A statement that any member of the public may request a hearing on the matter by contacting the Salt Lake County Health Department within 10 days after the final date of publication. A hearing will be held at the Director's discretion.
 - f. **Public Hearings.** Before issuing a permit, the Department may require the applicant to hold or participate in one or more public hearings. The Department may call a public hearing on its own initiative or in response to a request from a member of the public, subject to the Director's approval.
 - g. **Financial Assurances.** Before the Department issues a permit to construct or operate a solid waste management facility, the applicant shall obtain and file with the Department an approved financial assurance instrument that meets the requirements of Section 4.1.1(v) of this Regulation. The Department may require additional financial assurance if it determines that additional assurance is necessary. An applicant seeking permits for both a landfill and a processing facility located on the same property or on contiguous properties may satisfy the financial assurance requirement with a single instrument covering both facilities and need not submit duplicate information with the permit applications.
- (iv) **Application for Department Approval.** An application for Department approval shall be submitted at least 30 calendar days before beginning construction or making any modification to the facility's design, operation, or closure activities.
- (v) **Financial Assurance Requirements.**
- a. A facility owner or operator shall obtain the financial assurance required under Sections 4.1.1(iii)(g) and 4.1.1(v) to ensure that the facility is operated, maintained, closed and managed after closure in accordance with this Regulation and the facility's Department-approved plans and specifications.
 - b. Financial assurance shall be accompanied by and filed with a Department-approved financial assurance agreement signed and notarized by a company principal or other authorized representative, a representative of the financial assurance provider, and designated county officials.
 - c. Financial assurance cost estimates shall be based on:

- i. A certified environmental engineer performing closure and post-closure care at any time during the active life of the solid waste management facility. The cost estimate shall be adjusted in January of each year by the percentage, if any, by which the Consumer Price Index for the preceding calendar year differs from the Consumer Price Index until final closure; and
 - ii. The cost of disposing of the maximum amount of solid waste that may be stored at the facility at any one time.
 - d. The financial assurance cost estimate shall include, but is not limited to:
 - i. The cost of obtaining, transporting, and placing final cover over a landfill or, for a processing facility, the cost of transporting, treating, and disposing of the solid waste;
 - ii. The cost of vegetating the landfill, or the cost of removing solid waste from the processing facility and leaving the property clean and free from contamination;
 - iii. The cost of installing and maintaining required groundwater-monitoring wells, gas-monitoring devices, and other monitoring devices, and of conducting sampling and analysis for the periods required by Sections 4.1.4(iii) and 4.1.5(iii)g. and the facility's approved plans and specifications;
 - iv. The cost of maintaining the integrity of the landfill's final cover during the closure period; and
 - v. The cost of corrective action for known releases and any other closure and post-closure requirements.
 - e. **Exemptions.** A solid waste management facility whose debts and liabilities are obligations of a municipal, state, or federal government is exempt from the financial assurance requirements of this Regulation.
- (vi) **Department Review.** The Department shall issue a permit only if it determines that the plans, specifications, and other information required by this Regulation comply with this Regulation and all applicable state and federal laws, rules, and regulations.
- (vii) An applicant seeking to operate both a landfill and a processing facility located on the same property or on contiguous properties may obtain a single permit and provide a single financial assurance instrument covering both facilities. The Department shall adjust the permit fee and approve a financial assurance amount sufficient to ensure compliance with this Regulation. Neither the permit fee nor the required financial assurance amount shall exceed the total amount that would be required if separate

applications were submitted for the landfill and processing facility were made separately.

4.1.2 Processing Facilities Plans and Specifications.

- (i) **Report Requirements.** An applicant for a permit to construct or operate a processing facility shall submit to the Department the information required by Sections 4.1.2(i)(a) through (z). The Department may require one or more of the following items to be prepared by a Utah-licensed professional engineer.
 - a. Contact information for the processing facility's owner and operator and for the managers responsible for the facility's operation and maintenance. The contact information shall include names, email addresses, mailing addresses, and telephone numbers.
 - b. Evidence of ownership or a leasehold interest in the proposed site, including a legal description of the parcel boundaries identify the property's total area.
 - c. One or more plat maps or aerial photographs accurately showing:
 - i. The exact location and boundaries of the proposed facility and all homes, businesses, and structures within one-quarter mile of the facility boundaries;
 - ii. Access roads to the facility, internal roads, and equipment flow patterns;
 - iii. The location of fencing or other means of limiting access;
 - iv. The location of shelter and sanitary facilities for operating personnel;
 - v. The locations where salvaged materials will be stored;
 - vi. The location of existing and proposed utilities servicing the processing facility; and
 - vii. The property's general topography and any irregular topographic features.
 - d. Detailed drawings and specifications of all fencing, buildings, structures, equipment, storage areas, and other facility plans.
 - e. The proposed method of screening the facility from the surrounding area.

- f. The present and anticipated future population and geographic area to be served by the facility.
- g. A description of the anticipated present and future types, moisture content, quantities, and sources of solid waste to be processed at the facility. The description shall separately identify solid waste originating within Salt Lake County, elsewhere in Utah, and outside the State of Utah.
- h. The proposed methods of solid waste volume reduction, treatment, or processing to be undertaken at the facility, including, but not limited to, incineration, composting, compaction, compression, baling, shredding, grinding, tamping, separating, classifying, drying, or blending.
- i. The anticipated types of vehicles that will transport solid waste into and out of the processing facility and the procedures for loading and unloading those vehicles.
- j. The estimated frequency of solid waste deliveries to the processing facility and the removal of residue and salvaged or composted materials from the facility.
- k. The names and locations of the solid waste management facilities, businesses, or customers to which processed solid waste and residue will be transported.
- l. The design criteria, rated capacities, expected performance data, and noise emission data for the facility and its processing equipment.
- m. The primary and secondary types and sources of fuel to be used by the processing facility.
- n. The anticipated daily quantity and characteristics of residue, the disposal location for each residue, and the method by which each residue will be managed and disposed of. Residue includes, but is not limited to, fly and, bottom ash, by-products from air-pollution-control devices, and quench water.
- o. A description of the appurtenances and procedures that will be used to:
 - i. Perform daily cleanup;
 - ii. Handle heavy or bulky waste, special waste, or other waste requiring special handling;
 - iii. Store solid waste beyond the end of the working day;

- iv. Control or prevent dust, odors, fire, explosions, noise, and windblown materials; and
 - v. Manage solid waste and make necessary repairs during a major breakdown, including a power failure, equipment failure, or other failure that inhibits operations.
- p. The processing facility's policy for maintaining an operating record of the amounts and types of solid waste accepted at the facility.
 - q. The processing facility's personnel-training policy for preventing and responding to emergencies, including:
 - i. The proper selection and use of personal protective equipment (PPE);
 - ii. Communication methods; and
 - iii. Precautions and procedures to be used in the event of a release or discharge, including containment, cleanup, decontamination, and Department notification.
 - r. The processing facility's policy establishing procedures for excluding, isolating, and documenting loads containing radioactive, hazardous, liquid, or other solid waste not specifically permitted to be processed at the facility.

The policy shall include protocols and provisions for:

- i. Training facility personnel to recognize radioactive, hazardous, liquid, and other unauthorized solid wastes;
 - ii. Conducting random inspections of incoming loads;
 - iii. Inspecting of all suspicious loads;
 - iv. Isolating and handling special or other unauthorized waste;
 - v. Maintaining records of loads containing unauthorized wastes; and
 - vi. Notifying the Department of radioactive, hazardous, liquid, or other unauthorized solid waste identified at the facility.
- s. The processing facility's proposed methods for collecting, treating, and disposing of liquid waste, including leachate, and other residues generated by facility operations.
 - t. The processing facility's proposed salvage, recycling, resource-recovery, or reclamation activities involving incoming solid waste and

outgoing residue.

- u. The processing facility's proposal for the disposition or use of processed compost or other waste material.
- v. The processing facility's proposed plan for sampling and analyzing fly ash and bottom ash generated at the facility, including the frequency of sampling and analysis.
- w. Emissions data, including, but not limited to:
 - i. The anticipated types and quantity of emissions;
 - ii. Any chemical transformation of the emissions that may occur after release;
 - iii. Emission-dispersion patterns, fall out, and wet fall;
 - iv. The anticipated impact of the emissions on any non-attainment area;
 - v. The proposed methods of emissions monitoring, including stack monitoring;
 - vi. The potential health impacts of the emissions; and
 - vii. The number of people or geographic area that may be affected by the emissions.

Alternatively, the applicant may submit documentation concerning the emission that has been submitted to and accepted by Utah Department of Environmental Quality, Division of Air Quality.

- x. Emissions- and gas-monitoring plans and frequencies, if the Department determines that operation of the processing facility could affect air quality or pose a hazard.
- y. The processing facility's proposed methods and procedures for decontaminating equipment and containers.
- z. The processing facility's proposed water-monitoring plan required Section 4.1.6(i) of this Regulation, if the Department determines that operation of the processing facility could affect groundwater or surface-water quality.
- aa. **Landspreading Facility Additional Requirements.** In addition to the information required Sections 4.1.2(i)(a) through (z), the report submitted with an application for a landspreading facility permit shall include:

- i. A description of the benefits of landspreading the material.
- ii. A description of the potential impacts of landspreading on human health, animal health, and the environment, including:
 - 1. The uptake of heavy metals and toxic organic chemical by crops;
 - 2. The potential loss of cropland resulting from landspreading solid waste;
 - 3. The potential degradation of surface-water or groundwater quality;
 - 4. Impacts on soil biota;
 - 5. Impacts on existing or future vegetation;
 - 6. Effects on the food chain, including wildlife;
 - 7. Pathogen impacts;
 - 8. Odors and potential vector attraction; and
 - 9. Any other hazard that may be created by the landspreading facility.
- iii. A description of how the facility will address odors that may affect downwind residents and surrounding communities.
- iv. The depth to bedrock and the seasonal high groundwater at the proposed site.
- v. A description of how snow will be removed before landspreading, how run-on and run-off from snow melt or other precipitation will be managed, and the surface-drainage patterns of the proposed site.
- vi. A chemical analysis of the soils at the proposed landspreading facility, including surface soils and soils extending to a depth of 12 inches below the plowing depth. The analysis shall include pH, total Kjeldahl nitrogen, ammonia, chlorine, total phosphorus, total potassium, total solids, arsenic, cadmium, copper, total chromium, mercury, nickel, lead, selenium, zinc, and polychlorinated biphenyls. The results shall be reported on a dry-weight basis except for pH and total solids.

bb. Composting and Mulching Facility Additional Requirements.

- i. In addition to the information required by Section 4.1.2(i)(a) through (z), the report submitted with an application for a composting or a mulching facility permit shall also include:
 1. A description of the temperature-monitoring and other monitoring equipment, the location of the equipment, and the frequency of monitoring;
 2. A description of any additive material, including its origin, quantity, quality, and frequency of use;
 3. The special precautions or procedures to be used during wind, heavy rain, snow, and freezing conditions;
 4. The estimated duration of the composting or mulching process, measured from initiation through completion;
 5. For windrow systems, the proposed windrow dimensions, including width, length, and height; and
 6. The proposed method of aeration, including the turning frequency or a description of the mechanical aeration equipment and its capacity.
- ii. Compost piles or windrows shall be constructed on a Department-approved impermeable surface designed to prevent contamination of groundwater, surface water, and soil and to collect run-off and leachate.

(ii) Closure and Post-Closure Plan.

- a. A permit applicant shall prepare a written closure and post-closure plan that describes the monitoring, routine maintenance, and other methods and procedures necessary to close the processing facility at any point during its active life and to complete post-closure activities in accordance with Section 4.1.4(iii).
- b. After the Department approved the closure and post-closure plan, the plan may not be modified without further Department approval.
- c. A copy of the approved closure and post-closure plan shall be maintained at the facility or at a designated alternative location, and by the Department, throughout the closure and post-closure care periods.

4.1.3 Landfill Plans and Specifications.

- (i) **Report Requirements.** An applicant for a permit to construct or operate a landfill shall submit the following information to the Department. The Department may require one or more of the following items to be

prepared by a Utah-licensed professional engineer.

- a. Contact information for the landfill's owner and operator and for the managers responsible for the landfill's operation and maintenance. The contact information shall include names, email addresses, mailing addresses, and telephone numbers.
- b. Evidence of land ownership or a leasehold interest, in the proposed site, including a copies of any agreements or permissions authorizing use of the property as a landfill.
- c. The number of personnel to be employed at the landfill.
- d. The landfill's hours of operations.
- e. The landfill's anticipated operating life and the proposed use of the land following closure.
- f. The present and anticipated future population and geographic area to be served by the proposed landfill.
- g. One or more plat maps, aerial photographs, or blueprints accurately showing:
 - i. The exact location and boundaries of the proposed facility, and all homes, businesses, and structures within one-quarter mile of the facility boundaries;
 - ii. Current land use and zoning within one quarter mile of the facility and all runways within 5,000 feet of the landfill;
 - iii. Access roads to the facility, internal roads, and equipment flow patterns;
 - iv. The location of fencing or other means of limiting access;
 - v. The location of shelter and sanitary facilities for operating personnel;
 - vi. All public and commercial unloading areas;
 - vii. The locations where salvaged materials will be stored;
 - viii. The location of existing and proposed utilities servicing the landfill;
 - ix. Wells, watercourses, and surface drainage channels within the landfill and within one-quarter mile of its boundaries;
 - x. Rock outcroppings and the general topography and irregular topographic features within the landfill boundaries; and

- xi. Any other applicable details.
- h. All details listed above shall be identified and indicated on the plat maps, aerial photographs, or blueprints.
- i. A description of the historical and current land uses and the total area of the proposed landfill;
- j. A description of existing site conditions and proposed improvements for controlling run-on and run-off.
- k. A geohydrological assessment of the facility, as listed in Utah Administrative Code R315-310-4.
- l. A description of surface water within one-quarter mile of the landfill, including seasonal variations, and the minimum and maximum groundwater elevations, groundwater-flow patterns, and groundwater quality and quantity throughout the landfill site.
- m. A description of the liners to be installed to prevent the migration of waste, leachate and other contaminants.
- n. The availability, quantity, source, and characteristics of cover material and the proposed cover design, including cover material needed for emergency fire control and closure.
- o. The anticipated generation of leachate and decomposition gas, including their quantities and physical and chemical characteristics, and the proposed methods of control, monitoring, collection, treatment, and disposal.
- p. The present and anticipated future types, daily and total quantities, and source of solid waste to be deposited at the landfill. The description shall separately identify waste originating within Salt Lake County, elsewhere in Utah, and outside the State of Utah.
- q. The method and pattern of landfiling.
- r. Anticipated provisions for:
 - i. Equipment, including brand and model, available for efficient excavation, earth moving, spreading, compaction, and other operational needs;
 - ii. Fencing and other measures for controlling access and preventing windblown waste;
 - iii. Fire, dust, bird, vector, and odor control;

- iv. Traffic control and user notification requirements; and
- v. Salvaging or recovering waste for recycling.
- s. The landfill's policy for maintaining an operating record of the amounts and types of solid waste accepted at the facility.
- t. The landfill's personnel-training policy for preventing and responding to emergencies, including:
 - i. The proper selection and use of personal protective equipment (PPE); and
 - ii. Communication methods.
- u. The precautions and procedures to be used in the event of a release or discharge, including containment, cleanup, decontamination, and Department notification.
- v. The landfill's policy establishing procedures for excluding, isolating, and documenting loads containing radioactive, hazardous, liquid, or other unauthorized solid waste not specifically permitted for disposal at the landfill. The policy shall include protocols and provisions for:
 - i. Training facility personnel to recognize radioactive, hazardous, liquid, and other unauthorized solid waste;
 - ii. Conducting random inspections of incoming loads;
 - iii. Inspecting all suspicious loads;
 - iv. Isolating and handling special or other unauthorized waste;
 - v. Maintaining records of loads containing unauthorized waste; and
 - vi. Notifying the Department of radioactive, hazardous, liquid, or other unauthorized solid waste identified at the landfill.
- w. The landfill's policy on controlling run-on and run-off.
- x. The landfill's policy for handling special wastes.
- y. The landfill's water-monitoring plan as required by Section 4.1.6(i) of this Regulation.

(ii) Landfill Closure Plan and Post-Closure Plan.

- a. Landfill permit applicants shall prepare a written closure and post-closure plan describing the monitoring, routine maintenance, and other steps necessary to close the landfill and each landfill cell at any point

during the facility's active life and to complete post-closure activities in accordance with Section 4.1.5(iii) of this Regulation.

- b. The closure and post-closure plan shall include:
 - i. A description of the methods, procedures, and processes that will be used to close each landfill cell, including, but not limited to:
 - 1. Maintenance and control of the landfill and prevention of the escape of waste, leachate, decomposition products and gases, and runoff;
 - 2. The final facility topographic and drainage plan;
 - 3. The source and composition of cover material and the proposed slope, landscaping, and vegetation;
 - 4. The specific engineering procedures for on-site structures;
 - 5. A description of the monitoring and maintenance activities including frequency of performance required by Section 4.1.5(iii)(g), for each closed landfill or landfill cell;
 - 6. The names, addresses, and telephone numbers of the persons to contact regarding the landfill during closure and post-closure; and
 - 7. A description of the planned uses of the property during the post-closure care period.
 - ii. An estimate of the maximum portion of the landfill that will be open at any time during its active life and the proposed sequence for closing phased operations;
 - iii. An estimate of the maximum inventory of solid waste expected to be present on-site at any time during the landfill's active life; and
 - iv. A schedule for completing all activities necessary to satisfy the closure and post-closure requirements.
- c. The Department-approved closure and post-closure plan may not be modified without further Department approval.
- d. A copy of the approved closure and post-closure plan shall be maintained at the facility or at a designated alternative location, and by the Department, throughout the closure and post-closure care periods.

4.1.4 Processing Facility Minimum Design, Construction, Operating, and Closure Requirements.

(i) **Processing Facility General Design and Construction Requirements.**

- a. A processing facility shall be situated to minimize interference with other community activities.
- b. The Department may require the installation of ground-water-monitoring wells before construction or operation of a processing facility begins or at any time after the facility commences operation.
- c. A processing facility located within 500 feet of a residence shall be screened from view by a fence at least eight feet high that provides 75% screening.
- d. All-weather roads capable of accommodating loaded vehicles shall:
 - i. Be provided at the facility;
 - ii. Connect the facility to public roads;
 - iii. Be designed and maintained to prevent traffic congestion and hazards; and
 - iv. Be designed to minimize air and noise pollution.
- e. A processing facility shall be roofed and enclosed on at least three sides to prevent dust, litter, and other solid waste from escaping the premises.
- f. A processing facility shall have a scale or another Department-approved method to accurately determine the amount of solid waste received at the facility. If the facility uses a scale, the scale must be registered by the Utah Department of Agriculture Weights and Measures Program.
- g. A processing facility shall have an unloading area of adequate size and design to facilitate the rapid unloading of solid waste from collection vehicles.
- h. **Drainage.** A processing facility shall be designed to divert surface drainage around or away from the facility's operational areas.
- i. **Surfaces.** Floor surfaces shall be constructed of impervious materials, be easily cleaned by flushing, and be equipped with floor drains or a sump pump connected to a sanitary sewer system or an equivalent system approved by the Department to facilitate the removal of moisture.
- j. **Shelter.** Adequate drinking water, shelter from the elements, and sanitary facilities shall be available for facility personnel.

- k. **Surface Impoundments.** In addition to the requirements of Sections 4.1.4(ii)(a) through (m), surface impoundments shall comply with the following design and construction requirements:
- i. Surface impoundments shall be more than two feet deep and shall be designed and constructed with a minimum two-foot freeboard consisting of soil or other material approved by the Department. The freeboard shall at all times extend at least two feet above the highest point of the waste within the surface impoundment.
 - ii. Surface impoundments shall be constructed with a liner system to minimize percolation. The liner system shall consist of either impermeable clay with a hydraulic conductivity of 1×10^{-7} cm/sec or less, or a synthetic or manufactured liner approved by the Department.
 - iii. The base of the surface impoundment shall be at least five feet above both the seasonal high groundwater table and the top of bedrock.
 - iv. At least one upgradient and two down-gradient groundwater-monitoring wells, or more if required by the Department, shall be installed at the surface impoundment site. Groundwater monitoring wells shall be installed and sampled according to Section 4.1.6. Instead of or in addition to groundwater-monitoring wells, the Department may require a secondary liner system for the surface impoundment.
- l. **Landspreading Facilities.** In addition to the requirements Sections 4.1.4(ii)(a) through (m), landspreading facilities shall comply with the following design and construction requirements:
- i. A landspreading facility may not be located within 50 feet of a property line or within 500 feet of a residence or place of business, except where the adjoining property or residence is owned by the facility owner.
 - ii. A landspreading facility may not be located within 200 feet of a potable water supply or surface water, or within 25 feet of a drainage swale or surface drainage system.
 - iii. The Department may require the owner or operator to install at least one up-gradient and two down-gradient groundwater-monitoring wells in accordance with Section 4.1.6 of this Regulation.
- (ii) **Processing Facility General Operating Requirements.**

- a. The owner or operator of a processing facility shall comply with all plans, policies, and representations submitted to the Department

pursuant to the report requirements in Section 4.1.2(i) of this Regulation.

- b. **Signage.** A sign shall be posted at the entrance to the processing facility stating the facility's name, permit number, hours of operation, penalty for unauthorized use, necessary safety precautions, types of waste accepted or prohibited, and any other information necessary to protect public health and safety.

- c. **Minimum Operating Standards.**

- i. A processing facility shall be equipped, operated, and maintained to minimize interference with other community activities.
- ii. Solid waste shall be confined to the loading, unloading, and processing areas.
- iii. Dust, odor, and noise resulting from the unloading of solid waste and operation of the processing facility shall be controlled at all times in accordance with applicable local, state, and federal laws.
- iv. Accumulations of solid waste shall be controlled to minimize odors and prevent infestation by insects or rodents. The operator shall immediately implement additional effective vector-control measures when necessary to prevent or eliminate insects or rodents.
- v. All residue from the processing facility, including solid waste remaining at the end of the working day, shall be promptly disposed of at an approved landfill or stored in accordance with Section 4.1.4(ii)(d)(iii) of this Regulation.
- vi. Owners or operators of solid waste incinerators or other processing facilities that generate fly ash or bottom ash shall provide the Department with analysis results from an approved laboratory. Sampling and analysis shall be conducted at the frequency specified in the processing facility's plan required by Section 4.1.2(i)(v).
- vii. The facility owner or operator shall effectively collect, treat, and dispose of leachate and drainage from the facility. If required by the Department, leachate shall be sampled and analyzed before disposal and shall not cause or contribute to groundwater contamination, drain or discharge into surface water except pursuant to Utah Pollution Discharge Elimination System permit, or violate any applicable surface-water standard.
- viii. Unless otherwise approved by the Department, all wastewater from the processing facility shall be discharged into a sanitary sewer after permission is obtained from the publicly owned treatment

works.

- ix. The owner or operator of a processing facility shall divert surface-water run-on away from facility operations.
- x. **Water Quality Monitoring.** The Department may require the owner or operator of a processing facility to monitor the facility's effects on ground water and surface-water quality in accordance with Section 4.1.6 of this Regulation.

d. **Vehicles.**

- i. Collection vehicles shall be unloaded only within the enclosed structure or in designated areas approved by the Department.
- ii. Collection and transfer vehicles shall be loaded and operated to prevent solid waste from dropping, leaking, sifting, blowing, or otherwise being discharged.
- iii. A sufficient number of transfer vehicles or trailers shall be available to prevent excessive storage of solid waste at the processing facility. Vehicles containing garbage shall be removed or emptied as often as necessary to maintain sanitary conditions, but at least once every 24 hours.
- iv. Solid waste transfer vehicles shall be cleaned as frequently as necessary to prevent objectionable odors or that attract vectors.

e. **Permitted and Unauthorized Waste.**

- i. A processing facility shall accept and process only those types of solid waste authorized under its Department-issued permit.
- ii. Facility personnel shall be trained in accordance with the facility's policy to recognize radioactive, hazardous, liquid, or other unauthorized solid waste and shall immediately notify the Department when such waste is encountered.
- iii. Radioactive, hazardous, liquid, or other solid waste not authorized by the facility's permit shall not be accepted. The Department shall be notified immediately if hazardous waste is discovered at the facility.
- iv. Solid waste that is burning or at a temperature likely to cause a fire shall not be accepted at the processing facility.
- v. Any large, heavy, or bulky items that cannot be handled in the routine operation of the facility shall be excluded unless special provisions are made to handle the waste.

f. Load Inspection.

- i. At least 1% of the loads received at the processing facility each day shall be randomly selected for inspection.
- ii. The processing facility's owner or operator shall inspect all suspicious loads received at the facility.

g. Composting, Mulching, and Salvaging.

- i. Materials resulting from composting, mulching, salvaging, or similar processes that are offered for sale or use by the general public shall:
 1. Contain pathogens at levels not exceeding those acceptable to the Department;
 2. Not be capable of reaching the temperature of self-ignition while standing;
 3. Be innocuous;
 4. Be relatively odor free;
 5. Contain no sharp particles or objects that injure persons handling the compost or other material; and
 6. Not otherwise endanger public health.
- ii. **Composting Facilities:** During the composting process, the compost shall:
 1. Maintain an average temperature throughout the compost mass greater than 130 degrees Fahrenheit (55 degrees Celsius) for at least five days to reduce pathogens.
 2. Maintain a moisture content of 40% to 65% throughout processing.
 3. Outdoor storage – Compost Piles. Piles of composted material stored outdoors shall comply with local fire department requirements. If no local fire department requirements have been established, compost piles shall:
 - A. Be stored at least 50 feet from any structure or property boundary;
 - B. Have a volume of no more than 5,000 cubic feet per pile;

- C. Not exceed the reach of the machinery used to turn the compost or 25 feet, whichever is less; and
 - D. Have aisles between piles sufficiently wide to allow access by fire-fighting vehicles.
 - 4. Outdoor storage – Compost Windrows. Windrows of composted materials stored outdoors shall with local fire department requirements. If no local fire department requirements have been established, compost windrows shall:
 - A. Be constructed at least 20 feet from any structure or property boundary;
 - B. Have a volume of no more than 5,000 cubic feet per windrow;
 - C. Not exceed the reach of the machinery used to turn the compost or 25 feet, whichever is less; and
 - D. Have aisles between windrows at least one-half the windrow height or ten feet wide, whichever is greater.
 - 5. Indoor storage. Piles of composted materials stored within an enclosed structure shall comply with local fire department requirements or another Department-approved method.
- iii. **Mulching Facilities.** During the mulching process, mulch shall be managed in accordance with local fire department requirements. If no local fire department requirements have been established, mulch piles shall be managed to minimize spontaneous combustion and shall:
 - 1. Be stored at least 50 feet from any structure or property boundary;
 - 2. Have a volume of no more than 5,000 cubic feet per pile;
 - 3. Not exceed the reach of the machinery used to turn the mulch or 25 feet in height, whichever is less; and
 - 4. Have aisles between piles sufficiently wide to allow access for fire-fighting vehicles access.
- iv. **Salvaging Facilities.** Salvaging shall be conducted in a manner that prevents injury, interference with required facility operations, and vector harborage.

1. Salvaged material that is not confined to an area approved by the Department shall be removed from the facility within 24 hours after being salvaged.
 2. Drugs, cosmetics, foods, beverages, hazardous waste, and other similar materials capable of impairing public health shall not be salvaged unless authorized by the Department.
- h. **Maintenance.** Adequate provisions shall be made for routine maintenance of the processing facility and all appurtenances.
- i. The processing facility, including access roads, shall be cleaned as often as necessary to prevent health hazards, or litter.
 - ii. All plumbing shall be properly maintained, and floors shall be adequately drained and kept free of standing water.
 - iii. All utility services shall be properly maintained.
 - iv. All operational equipment shall be repaired promptly and efficiently.
- i. **Alternative Operation.** If the processing facility becomes inoperable for any reason, a Department-approved alternative method shall be used for solid waste processing or disposal.
- j. **Emergency Management.**
- i. Emergency procedures shall be adopted and provided to employees for responding to any discharge of solid waste including procedures for the emergency clean-up decontamination, and notification of emergency personnel and the Department.
 - ii. Equipment shall be provided to control accidental fires and arrangements shall be made with the local fire protection agency to provide emergency services when needed.
 - iii. Methods of communication shall be available for emergency purposes.
- k. **Supervision.** During hours when the public has access to the processing facility, the facility shall be operated under the close supervision of responsible individuals familiar with its requirements and operating procedures.
- l. **Access.**
- i. Public access to the facility shall be limited to hours of operation.

- ii. Access shall be restricted in areas where explosion hazards exist or where hazardous materials are stored or handled.
- m. **Operating Record.** The processing facility's owner or operator shall maintain an operating record and submit it to the Department upon request. The operating record shall include:
 - i. The types and amounts of solid waste handled, composted, processed, treated, or incinerated at the facility;
 - ii. The amount of fuel, compost, or other recovered or recyclable material produced from solid waste at the facility;
 - iii. The amount and composition of by-products or residue removed;
 - iv. The disposition of by-products or residue;
 - v. Combustion temperatures and residence times;
 - vi. Stack-testing and other air-pollution-monitoring results;
 - vii. Records of all incoming-load inspections conducted at the facility;
 - viii. Groundwater-monitoring, testing, and analytical data gathered pursuant to Section 4.1.6 of this Regulation.
 - ix. Records of inspections, training, and notifications required by Section 4.1.4(ii)(e) of this Regulation; and
 - x. Any other information concerning operation of the processing facility that is not otherwise specified in this Regulation and that the Department requires.
- n. **Surface Impoundments.** In addition to the requirements Sections 4.1.4(ii)(a) through (m), the owner or operator of a surface impoundment shall comply with the following operating requirements:
 - i. Baseline water quality data for the parameters listed in Utah Administrative Code R315-308 shall be established before any solid waste is deposited in the surface impoundment.
 - ii. Soils at the facility shall be analyzed for pH and the metals listed in Utah Administrative Code R315-308 before any solid waste is deposited in the surface impoundment.
 - iii. The Department may require additional chemical analysis before waste is deposited in the surface impoundment.
 - iv. The owner or operator shall ensure that cleaning or blending within the surface impoundment or removing sludge from the surface

impoundment does not damage the integrity of the liner system.

- v. Surface impoundments shall be completely emptied annually unless otherwise approved by the Department. The Department shall be notified at least seven days before the impoundment is emptied to allow inspection of the liner before refilling. Any damage to the liner shall be repaired before any liquid, semi-liquid, or other waste is placed in the surface impoundment.
- vi. Groundwater samples from monitoring wells or other monitoring devices shall be collected and analyzed quarterly, unless otherwise approved by the Department, for the following parameters: chloride, nitrate, sulfate, total hardness, alkalinity, total organic carbon, chemical oxygen demand and the field parameters listed in Utah Administrative Code R315-308.
- vii. Groundwater samples from monitoring wells or other monitoring devices shall be collected and analyzed semi-annually, unless otherwise approved by the Department, for the priority metals listed in Utah Administrative Code R315-308 and for persistent organic compounds identified by the Department.
- viii. An annual report shall be submitted to the Department that includes the results of all required analyses, the sources and quantities of all materials placed in the surface impoundment, the date and the amounts of material removed from the impoundment, and the destinations of the removed material.
- o. **Landspreading Facilities.** In addition to the requirements of Section 4.1.4(ii)(a) through (m), the owner or operator of a landspreading facility shall comply with the following operating requirements and prohibitions:
 - i. Materials determined to be hazardous by the Department, the State of Utah, or the federal government shall not be landspread;
 - ii. At intervals approved by the Department, the landspreading facility's owner or operator shall collect samples and provide chemical analysis for the parameters listed in Utah Adminsitratve Code R315-308 from:
 - 1. Groundwater obtained from monitoring wells;
 - 2. Sludge at the facility. Sludge shall be analyzed for nitrogen upon receipt at the facility and after processing. Samples shall be collected as grab samples, immediately frozen upon collection, and maintained in a frozen state throughout the storage period;

3. Soils at the landspreading facility; and
 4. Vegetation grown at the facility.
- iii. The owner or operator of the landspreading facility shall provide the Department with the facility's loading rates, loading capacities, and proposed maximum loading limits and shall provide assurance that the Department-approved soil limits will not be exceeded.
- p. **Waste Tire Storage Facility Requirements.** In addition to the requirements of Section 4.1.4(ii)(a) through (m), waste tire storage facilities shall also comply with the following operating requirements. Sections 4.1.4(ii)(p)(i) through (vii) are required in Utah Administrative Code R315-314.
- i. Waste tire storage areas shall be fenced to control access.
 - ii. Tires shall be stored in a manner that provides fire protection by limiting each storage area or tire pile to no more than 5,000 square feet of continuous area 50,000 cubic feet in volume or ten feet in height.
 - iii. A space at least 40 feet wide shall be provided and maintained between storage areas or waste tire piles. A distance of at least 10 feet shall also be maintained between each storage area or waste tire pile and the property boundary and between each storage area or waste tire pile and any building and not exceed six feet in height if within 20 feet of any property boundary or building. These spaces shall not be obstructed by buildings or debris and shall not contain weeds, trees, or other flammable materials.
 - iv. Waste tire storage areas shall be maintained free from combustible ground vegetation for a distance of 40 feet from the stored material to grass and weeds.
 - v. Equipment, soil and other Department approved materials shall be readily available in quantities sufficient to extinguish fires at the facility.
 - vi. The facility shall employ vector control measures which may include:
 1. Covering waste tire storage areas with Department approved impermeable barriers that prevent the accumulation of precipitation;
 2. Treating the tires with Department approved chemicals;
 3. Shredding tires to eliminate vector breeding; or

4. Storing tires in a manner that allows complete drainage.
- vii. Approach roads and space between tire piles shall be maintained to allow firefighting equipment ready access to fires.

(iii) Processing Facility Closure and Post-Closure Requirements.

- a. The owner or operator shall close the processing facility in a manner that minimizes the need for further maintenance and the post-closure formation and release of leachate, gases, or odors to the air, groundwater, or surface water.
- b. At least 90 calendar days before closing the processing facility, the owner or operator shall notify the Department of the closure. The Department shall inspect the facility to determine whether corrective repairs or additional closure or post-closure care are needed.
- c. At least 30 calendar days before closure, the owner or operator shall notify facility users of the closure. A municipality, business, or hauler shall be notified directly. If the processing facility is used by the general public, notice shall be posted at the facility.
- d. The owner or operator shall begin closure activities of the facility in accordance with the Department-approved closure plan no later than 30 calendar days after the facility's final receipt of solid waste. In addition to the closure and post-closure activities approved in the closure and post-closure plan, the owner or operator shall conduct closure and post-closure care, including, but not limited to:
 - i. Removing all solid waste and waste residues from the facility property, unless the facility is also permitted as a landfill;
 - ii. Monitoring groundwater and surface water in accordance with Section 4.1.6 of this Regulation for a period determined by the Department;
 - iii. Sampling and analyzing of soil to determine whether soil contamination has occurred; and
 - iv. Constructing additional fencing or other appropriate structures to limit access and posting signs indicating that the facility is closed and identifying alternative disposal locations.
- e. Following completion of closure and post-closure care, the Department shall determine whether the processing facility was closed and maintained in accordance with the closure and post-closure plan. Before granting final approval, the Department may require that a qualified Utah Licensed Professional Engineer certify the closure.

4.1.5 **Landfill Construction, Design, Operating, and Closure Requirements.**

(i) **Landfill Design and Construction Requirements.**

- a. Before constructing a landfill, the owner or operator shall install groundwater-monitoring wells and establish a program for sampling and analyzing and, if required by the Department, surface water quality.
- b. A landfill shall be designed to protect the environment and the health and safety of employees, patrons, and the public.
- c. A landfill shall be constructed to control run-off from the active area of the landfill during peak discharge from a 24-hour 25-year storm. Run-off controls shall include suitable channel and diversion structures, including, but not limited to, ditches, berms, or dikes, to divert surface-water runoff from land adjoining the landfill.
- d. A liner system shall be installed in each new landfill or new landfill cell to minimize potential leachate migration. The liner system shall prevent vertical and horizontal migration and shall consist of either clay with a hydraulic conductivity of 1×10^{-7} cm/sec or less, or a synthetic or manufactured liner approved by the Department.
- e. The owner or operator shall install gates and fencing around the landfill to restrict unauthorized access and use of the facility.
- f. **Asbestos Waste Disposal Sites.** Asbestos waste disposal sites shall be screened by fencing or berms and posted with warning signs on all four sides. The words "CAUTION ASBESTOS WASTE" or similar language, shall appear on the signs in lettering at least three inches high.

(ii) **Landfill Operating Requirements.**

- a. The owner or operator of a landfill shall comply with all plans, policies, and representations submitted to the Department pursuant to the report requirements in Section 4.1.3(i) of this Regulation.
- b. A landfill shall be operated in a manner that protects the environment and the health and safety of employees, patrons, and the public.
- c. The owner or operator of a landfill shall provide its employees:
 - i. A safety manual and instruction on applying the procedures in the manual; and
 - ii. Personal safety equipment, including, but not limited to, hard hats, gloves, safety glasses, and safety footwear.

- d. The owner or operator of a landfill shall maintain the following operating records and make them available to the Department upon request:
 - i. Inspections of incoming loads conducted by landfill personnel;
 - ii. Employee safety trainings;
 - iii. The amount of solid waste accepted at the landfill for disposal as determined by weighing incoming loads, measuring the volume of incoming loads, or estimating the area filled by each incoming load;
 - iv. The types of solid waste accepted for disposal at the landfill;
 - v. The amount and location of landfill area completed;
 - vi. Groundwater-monitoring, testing, and analytical data gathered pursuant to the requirements in Section 4.1.6 of this Regulation.
 - vii. Methane-gas monitoring data gathered pursuant to Section 4.1.5(iv) of this Regulation.
 - viii. The amount of leachate generated at the facility;
 - ix. The frequency of leachate testing and analysis. If required by the Department, leachate sampling and analysis shall be conducted at least:
 - a. Twice a year for landfills permitted to receive industrial waste; and
 - b. Twice a year for municipal waste landfills.
 - x. If required by the Department, the methods used to test and analyze leachate;
 - xi. If required by the Department, analytical data from leachate testing;
 - xii. The methods used to pump and dispose of leachate; and
 - xiii. Closure and post-closure plans required under Section 4.1.3(ii) of this Regulation.
- e. **Solid Waste Disposal Restrictions.**
 - i. A landfill shall not accept hazardous or liquid waste. A municipal waste landfill may, however, accept household hazardous waste and liquid waste generated by households provided that the waste

is not septic waste and is contained in containers with a capacity no more than five gallons.

- ii. A landfill shall not accept asbestos waste for disposal unless the landfill is permitted to accept asbestos waste.
 - iii. A landfill shall not accept waste tires with a rim diameter greater than 24.5 inches, tire shred, or other material derived from shredded tires unless the landfill is permitted to accept waste tires.
 - iv. Solid waste shall be unloaded and deposited only in areas designated by landfill personnel and as authorized by the Department.
 - v. Solid waste shall not be deposited in surface water or groundwater and shall be prevented from entering or leaching into surface water or groundwater.
 - vi. Open burning shall not be permitted at a landfill. Fires in solid waste delivered to the landfill or occurring at the working face or within equipment or personnel facilities shall be extinguished as quickly as possible.
- f. **Unauthorized Solid Waste Detection.** The owner or operator of a landfill shall develop and implement a policy for detecting and preventing the disposal or attempted disposal of unauthorized solid waste at the landfill. The policy shall provide protocols for:
- i. Inspecting at least 1% of all incoming loads each day, selected on a random basis, and inspecting all suspicious incoming loads;
 - ii. Maintaining records of inspections of incoming loads;
 - iii. Training site personnel to recognize hazardous waste and other unauthorized waste discovered at the landfill.
- g. Landfill personnel shall immediately notify the Department if an incoming load of solid waste is rejected or if hazardous or other unauthorized waste is found at the landfill. Notice shall be provided in writing on a form prescribed by the Department. If applicable, a copy of the notice shall be provided to the hauler of the rejected waste.
- h. **Noise and Vector Control.**
- i. The landfill shall be maintained in a manner that prevents vector breeding or feeding.
 - ii. Vector, dust, and odors shall be effectively controlled so that they do not create a hazard to health or safety.

- iii. Noise levels at the facility shall be controlled to prevent noise levels beyond the property line from exceeding the allowable limits established by the Department's Health Regulation #21, Community Noise Pollution Control.
- i. On-site roads and other through-ways shall be passable and safe at all times. This section does not prohibit the owner or operator from restricting access to closed portions of the landfill.
- j. Access to the landfill shall only be allowed during hours of operation.
- k. **Signage.**
 - i. The owner or operator of a landfill shall post a sign at the landfill entrance stating the landfill's name, permit number, hours of operation, penalty for unauthorized use, required safety precautions, types of waste accepted and prohibited, and any other pertinent information required to protect the health and safety of persons present at the facility.
 - ii. The owner or operator shall post signs throughout the facility direct traffic to open off-loading areas.
- l. Qualified personnel shall be present at the landfill to supervise activities during all hours of operation.
- m. The owner or operator shall provide employees with equipment for communicating with one another and with first responders in the event of an emergency at the facility. All operational equipment shall be repaired promptly and efficiently.
- n. Adequate equipment for trenching, compacting, and covering solid waste shall be available at the landfill during operating hours and for emergency response.
- o. Each piece of equipment used to spread or compact solid waste or cover material at the landfill shall be equipped with appropriate safety devices including, but not limited to, rollover protective structures, seat belts, audible reverse warning devices, and a fire extinguisher.
- p. Salvaging shall be conducted only by a lawfully permitted recycler and in a manner that prevents injury, interference with required landfill operations, and the creation of a health or safety hazard, or vector harborage. Drugs, cosmetics, foods, beverages, hazardous chemicals, poisons, pesticides, infectious waste, or other similar materials capable of impairing public health shall not be salvaged.
- q. Solid waste shall be compacted to the greatest degree practicable. The working face shall be limited to the smallest practicable to minimize the amount of exposed waste without interfering with effective

operating procedures.

- r. At least six inches of cover material shall be placed daily over all solid waste received, or as often as directed by the Department, after compaction of the solid waste to the smallest practicable volume. Cells that will not receive additional solid waste for 30 days or more shall be covered with at least 12 inches of cover material.
- s. Within 30 days after completion of a cell, at least two feet of compacted final cover material shall be placed over the completed cell. The same final cover shall be placed over any portion of a landfill where no additional waste will be placed for more than 12 months. Final grading of the cell or inactive area of the landfill where no additional waste will be placed for a more than 12 months shall promote drainage away from the landfill and shall have a minimum slope of 2% and a maximum of 33 percent.
- t. The final cover on each completed portion of the landfill shall be vegetated to minimize erosion and maximize evapotranspiration.
- u. Leachate from a new landfill or cell shall be collected in a Department-approved leachate-collection system and sampled and monitored as required by the Department. Leachate shall be disposed of through a Department-approved controlled leachate-recirculation process or by another Department-approved method of leachate disposal. Leachate shall not drain or discharge into surface water except pursuant to a Utah Pollution Discharge Elimination System Permit and shall not cause or contribute to groundwater contamination or a violation of an established groundwater- or surface-water standard.
- v. Surface water run-on and run-off shall be diverted from the active portion of the landfill during peak discharge from a 24-hour 25-year storm. Run-off that has not been contaminated by solid waste shall be routed to a settling basin or controlled by other equally effective measures to remove sediment before discharge to a receiving stream.
- w. **Methane Monitoring.** During the active life of the landfill, the owner or operator of a landfill permitted pursuant to Section 4.1.1(i)(b)(i) shall routinely monitor landfill methane concentrations in accordance with Section 4.1.5(iv) to ensure that:
 - i. The concentration of methane gas generated by the landfill does not exceed 25% of methane's lower explosive limit (LEL) in structures at the landfill, excluding gas-control or recovery-system components; and
 - ii. The concentration of methane gas generated by the landfill does not exceed methane's LEL at the landfill boundary.

- x. **Groundwater and Surface-Water Monitoring.** The owner or operator of a landfill shall routinely monitor groundwater and surface water in accordance with Section 4.1.6 to ensure the solid waste deposited at the landfill does not degrade groundwater or surface-water quality or violate any rule or regulation of the Department, the State of Utah, or the federal government.
- y. **Landfills and Cells Permitted to Accept Asbestos Waste.** In addition to the operating requirements set forth in Sections 4.1.5(ii)(a) through (x), landfills and landfill cells permitted to accept asbestos waste shall comply with the following requirements:
 - i. **Additional Operating Record Requirement.** The owner or operator of a landfill or landfill cell permitted to receive asbestos waste shall maintain an additional operating record identifying each person who disposes of asbestos waste at the landfill and the amount of asbestos waste disposed by that person.
 - ii. A landfill permitted to receive asbestos waste shall accept only asbestos waste that is wetted and contained in securely tied, six-mil-thick plastic bags or other durable containers approved by the Department. The owner or operator shall notify the Department of any asbestos waste received at the landfill that is not wet or properly contained. Asbestos waste capable of being emitted in the atmosphere during normal unloading shall not be unloaded unless the material is wetted and the Department is notified.
 - iii. The owners or operator shall ensure that asbestos waste is unloaded in a manner that minimizes breakage of containers or bags. The facility may require users to provide advance notice of the date and time the asbestos waste will be transported and the volume to be disposed of so that facility personnel can oversee unloading.
 - iv. Unless otherwise approved by the Department, asbestos waste shall be placed only in pre-dug trenches located away from other solid waste management operations. Asbestos waste cells shall not be located on top of existing solid waste.
 - v. All asbestos waste received at a landfill shall be covered daily, or as often as directed by the Department, with Department-approved cover material, such as soil free of debris or other objects that may puncture asbestos-containing bags or containers. Asbestos waste shall be covered with at least 24 inches of cover material if equipment will be driven over the disposal area or with at least 6 inches of cover material if the waste is placed in trenches and equipment will not be driven over the disposal area.

- vi. The owner or operator of a landfill permitted to receive asbestos waste shall provide the Department with, and retain on file, a plat map showing the exact location of all asbestos disposal areas.

(iii) **Landfill Closure and Post-Closure.**

- a. The owner or operator shall close each landfill or cell according to the closure plan submitted pursuant to Section 4.1.3(ii) of this Regulation and in a manner that minimizes the need for further maintenance and the post-closure formation and release of leachate and explosive gasses into the air, groundwater, or surface water to the extent necessary to protect the public health and welfare and prevent any hazards.
- b. The final grade of the landfill shall promote drainage away from the landfill and shall have a minimum slope of 2% and a maximum side slope of 33 percent. Final cover material shall be well compacted to promote runoff while minimizing infiltration.
- c. The owner or operator shall notify the Department at least 90 days before closure so that the Department may review the closure and post-closure plans for completeness.
- d. The owner or operator shall notify users at least 30 days before closure. Municipalities and haulers shall be notified by letter or in person. The public may be notified by posting notice at the landfill.
- e. The owner or operator shall begin closure activities for each landfill or cell, in accordance with the Department-approved closure plan, within 30 days after final receipt of waste at the landfill or cell. The Department may grant an extension of the 30-day deadline if the owner or operator demonstrates that the landfill or cell will not pose a threat to public health or the environment.
- f. Before closure activities begin, the Department may require the owner or operator to install additional fencing or other appropriate structures to limit access, post signs indicating the closure and identifying alternative disposal sites, and place all litter and other waste in the landfill or cell.
- g. Following closure of a landfill permitted to accept municipal solid waste, construction and demolition waste, or non-hazardous industrial waste, the owner or operator shall conduct post-closure care for 30 years or for as long as the Department determines necessary for the landfill or cell. For a monofill, the post-closure care period shall be 10 years or for as long as the Department determines necessary. Post-closure care shall include, but not be limited to:
 - i. Maintaining the integrity and effectiveness of all final cover, including repairing the cover as necessary to correct the effects of settling, subsidence, erosion, or other events, and preventing run-

on and run-off from eroding or otherwise damaging the final cover.

- ii. Maintaining and operating the leachate-collection system in accordance with Section 4.1.5(ii)(u) for 30 years, for as long as the Department determines necessary for the landfill or cell, or until leachate is no longer generated.
- iii. Monitoring groundwater in accordance with Section 4.1.6 and maintaining the groundwater-monitoring system; and
- iv. Maintaining and operating the methane-gas monitoring system in accordance with Section 4.1.5(iv).
- h. Following the period described in Section 4.1.5(iii)(g), the owner or operator shall conduct any additional post-closure care, including but not limited to, groundwater and methane-gas monitoring for the period determined by the Department to protect public health and welfare and the environment and to prevent hazards.
- i. Post-closure use of the landfill property shall not disturb the integrity of the final cover, liner, or any other component of the containment or leachate-collection systems or interfere with the operation of the monitoring systems. The Department may approve an activity that would cause such a disturbance if the owner or operator demonstrates that the activity will not increase a potential threat to public health or that the disturbance is necessary to reduce a threat to public health. The owner or operator shall obtain Department approval before excavating any closed portion of the landfill or removing any waste, waste residue, liner or contaminated soil.
- j. Following closure of a landfill or cell and following completion of post-closure care, the owner or operator shall submit certification to the Department verifying that closure or post-closure care, as applicable, completed in accordance with the Department-approved closure and post-closure plan. The certification shall be completed by the Department or an independent Utah Licensed Professional Engineer.
- k. **Property Deed Recording.**
 - i. Following final closure of the landfill or cell, the owner or operator shall record a notation on the deed to the landfill property, or some other instrument that is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property's prior use as a landfill and any restrictions on the property's use.
 - ii. If the owner or operator, or any subsequent owner or operator of the land on which a landfill cell is located, wishes to remove waste, waste residue, a liner, or contaminated soil, the owner or operator

shall first obtain the Department's approval. The owner or operator may also request permission from the Department to remove or modify the notation on the deed or other instrument normally examined during title search if all waste has been removed and no contamination of groundwater or soil is present.

(iv) **Methane-Monitoring Requirements.**

- a. When monitoring methane concentrations pursuant to Sections 4.1.5(ii)(w) and 4.1.5(iii)(g) of this Regulation, the owner or operator shall collect and maintain data identifying the methane concentrations detected in landfill structures and at the landfill boundary, the frequency of monitoring, and the type of monitoring equipment used.
- b. To comply with the methane-monitoring requirement in Sections 4.1.5(ii)(w) and 4.1.5(iii)(g) of this Regulation, the owners or operators shall determine the type and frequency of methane monitoring based on the following criteria:
 - i. Soil conditions;
 - ii. Hydrogeologic conditions surrounding the landfill;
 - iii. Hydraulic conditions surrounding the landfill; and
 - iv. The locations of landfill structures and property boundaries.
- c. If methane-gas concentrations exceed 25% of the LEL within any structure or the LEL at the landfill boundary, the owner or operator shall:
 - i. Immediately take all steps necessary to protect human health and safety;
 - ii. Immediately notify the Department of the methane-gas concentrations detected and any remediation measures already taken; and
 - iii. Within 14 days, submit an ongoing methane-remediation plan to the Department for approval. The plan shall describe the nature and extent of the problem and the proposed remedy. The owner or operator shall implement the plan upon Department approval.

4.1.6 Groundwater and Surface-Water Monitoring Requirements. If this Regulation or the Department requires the owner or operator of a solid waste management facility to monitor groundwater or surface water, the owner or operator shall:

- (i) Maintain a current, Department-approved Water Monitoring Plan on file with the Department. Once the Department approves the Water

Monitoring Plan, the owner or operator shall comply with its requirements and incorporated standards. The Water Monitoring Plan shall include:

- a. Proposed methods for well construction. The owner or operator shall obtain of the construction methods before well construction begins;
 - b. The name of the person who will perform water-quality sampling and the proposed sampling frequency, sampling period, and sampling methods;
 - c. The name of the laboratory that will perform sample analysis;
 - d. The types, methods, and procedures of analysis to be performed on water samples;
 - e. A quality-assurance and quality-control plan for well construction and for groundwater sampling and analysis. The Department shall approve the quality-assurance and quality-control plan before the owner or operator obtains baseline water quality pursuant to Section 4.1.6(vi) of this Regulation;
 - f. The baseline water-quality protection standards obtained pursuant to Section 4.1.6(vi) of this Regulation. The owner or operator shall submit the baseline water-quality data to the Department within 30 days after the baseline is determined. The Department shall establish groundwater and surface-water-quality protection standards based on the baseline water quality and incorporate those standards into the solid waste management facility's Water Monitoring Plan;
 - g. A proposed sampling timetable;
 - h. A proposed statistical method for determining whether a significant change from baseline water quality has occurred; and
 - i. Any other record or report required by the Department to protect groundwater and surface-water quality.
- (ii) Notify the Department at least seven days constructing monitoring wells to allow a Department representative to be present during construction.
 - (iii) Install monitoring wells in accordance with the following specifications:
 - a. Unless otherwise specified in this Regulation, the Department shall determine the number of monitoring wells to be installed and the depths of up-gradient and down-gradient wells based on on-site terrain features; the types of solid waste to be deposited, treated, or processed; soil types and conditions at the solid waste management facility; hydrogeologic conditions surrounding and beneath the facility; and hydraulic conditions surrounding and beneath the facility, including

groundwater depth to and flow rate.

- b. Monitoring wells shall be constructed to prevent contamination of samples and sampled strata and contamination between aquifers and water-bearing strata;
 - c. Monitoring wells shall be cased in a manner that maintains the integrity of each monitoring-well bore-hole and allows the collection of representative groundwater samples; and
 - d. Monitoring wells shall, at a minimum, comply with the construction standards in Utah Administrative Code R655-4-15.
- (iv) Operate and maintain all monitoring wells and other devices and equipment used to monitor groundwater and surface water so that they perform in accordance with their design specifications throughout the entire period of Department-required monitoring.
 - (v) Notify the Department at least seven calendar days before sampling to allow a Department representative to be present during sampling and to collect duplicate samples if the Department determines that duplicate samples are necessary.
 - (vi) Obtain baseline water quality during the first year after the monitoring wells are installed, unless otherwise approved or required by the Department. Baseline water quality shall be established before waste is deposited in the landfill. Baseline water quality shall be established by analyzing at least eight independent samples from each upgradient well or upstream surface-water point and four independent samples from each downgradient well or downstream surface-water point for all parameters listed in Utah Administrative Code R315-308 and any additional parameters required by the Department.
 - (vii) After baseline constituent levels have been established, the Department shall establish ground-water quality-protection standards that shall become part of the permit.
 - (viii) After baseline water quality has been established, sample for the routine parameters listed in Utah Administrative Code R315-308. The Department may modify this requirement on a case-by-case basis based on the nature of the groundwater, surface water, or solid waste management facility and consideration of:
 - a. The types, quantities, and concentrations of constituents in solid wastes found at the solid waste management facility;
 - b. For groundwater monitoring only, the mobility, stability, and persistence of solid waste constituents or their reaction products in the unsaturated zone beneath the solid waste management facility;

- c. The detectability of indicator parameters, solid-waste constituents, and reaction products in groundwater; and
 - d. Baseline water-quality values and the coefficients of variation of monitoring parameters or constituents in groundwater.
- (ix) Conduct groundwater and surface-water sampling and analysis at least twice a year.
- (x) Ensure that samples and measurements taken for monitoring purposes are collected and analyzed using the in the latest edition of EPA's *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium* (SW-846) or other Department-approved methods. Samples shall be representative and collected in accordance with the quality-assurance and quality-control plan approved by the Department.
- (xi) Have a Utah certified environmental laboratory analyze the samples using methods in the latest edition of EPA's Compendium SW-846 or other Department approved methods.
- (xii) Determine whether a significant change from baseline water quality has occurred using a statistical method proposed in the landfill's Water Monitoring Plan and approved by the Department. Statistical methods may include:
 - a. A parametric analysis of variance (ANOVA) followed by multiple-comparison procedures to identify statistically significant evidence of contamination. The method shall include estimating and testing the contrasts between the mean for each downgradient monitoring well and the baseline water-quality mean for each constituent;
 - b. A parametric analysis of variance based on ranks followed by multiple-comparison procedures to identify statistically significant evidence of contamination. The method shall include estimating and testing the contrasts between the median for each downgradient monitoring well and the baseline water-quality median for each constituent;
 - c. A tolerance- or prediction-interval procedure under which an interval for each constituent is established from the distribution of the baseline data and the level of each constituent in each monitoring well is compared with the upper tolerance or prediction limit;
 - d. A control-chart approach that establishes control limits for each constituent; or
 - e. Another Department-approved statistical testing method.
- (xiii) If the concentration of any of the parameters listed in Utah Administrative Code R315-308 statistically exceeds the established baseline level, the

owner or operator shall:

- a. Within 14 days after receiving the sample-analysis results, notify the Department in writing and record the information in the operating record. The notice shall identify the parameters or constituents for which statistically significant changes were detected;
 - b. Immediately resample the surface water or groundwater in all monitoring wells, both upgradient and downgradient, or in a subset of wells specified by the Department. The owner or operator shall determine the concentrations of all constituents listed in Utah Administrative Code R315-308 and any additional constituents identified in the Water Monitoring Plan, whether there is a statistically significant change has caused an established groundwater- or surface-water-quality protection standard to be exceeded, and notify the Department in writing within seven days after receiving the sample-analysis results; and
 - c. The owner or operator may demonstrate that a source other than the solid waste management facility caused the contamination or that the statistically significant change resulted from error in sampling, analysis, or statistical evaluation or from natural variation in groundwater or surface-water quality. A report documenting the demonstration shall be certified by a Department-approved groundwater scientist and placed in the operating record. If the owner or operator successfully makes and documents the demonstration, the owner or operator may continue monitoring as specified in Section 4.1.6(viii).
- (xiv) If the owner or operator does not make a successful demonstration, under Section 4.1.6(xiii)(c) within 90 days, the owner or operator shall initiate an assessment-monitoring program as follows:
- a. Collect one sample from each down-gradient well or downstream surface-water point and analyze each sample for all constituents listed in Utah Administrative Code R315-308.
 - b. For each constituent listed in Utah Administrative Code R315-308 that is detected in a downgradient well or downstream surface-water point, collect and analyze at least four independent samples from each upgradient well or upstream surface-water point and four independent samples from each downgradient well or downstream surface-water point to establish baseline water quality for that constituent;
 - c. Within 14 days after receiving the sample-analysis, notify the Department in writing identifying the constituents listed in Utah Administrative Code R315-308 that were detected, their concentrations, and their baseline levels, and record the data in the operating record. The Department shall establish a groundwater- or surface-water-quality protection standard pursuant to Section 4.1.6(vi)

for each constituent listed in Utah Administrative Code R315-308 detected in a downgradient well or downstream surface-water point;

- d. Thereafter, the owner or operator shall resample:
 - i. All wells and surface-water points quarterly for all constituents listed in Utah Administrative Code R315-308 or an alternative list approved and incorporated into the facility's Water Monitoring Plan; and
 - ii. All downgradient wells or surface-water points annually for all constituents listed in Utah Administrative Code R315-308.
 - e. If after two consecutive sampling events, the concentrations of all constituents analyzed pursuant to Section 4.1.6(xiv)(d) are at or below established baseline values, the owner or operator shall notify the Department. Upon Department approval, the owner or operator may return to the monitoring schedule and constituents as specified in Sections 4.1.6(viii) and (ix).
- (xv) If one or more constituents listed in Utah Administrative Code R315-308 or an approved alternative list are detected at statistically significant levels above the groundwater- or surface-water-quality protection standard established pursuant to Section 4.1.6(vi), the owner or operator:
- a. Within 14 days after receiving finding, notify the Department in writing of each constituent and concentration that exceeded the groundwater- or surface-water-quality protection standard and record the data in the operating record;
 - b. Characterize the nature and extent of the release by installing additional monitoring wells or designating additional surface water monitoring points as necessary;
 - c. Install at least one additional monitoring well, or designate at least one additional surface-water-monitoring point, at the facility boundary in the direction of contaminant migration and analyze samples from the well or monitoring point for the constituents listed in Utah Administrative Code R315-308 or the approved alternative list;
 - d. Notify each person who owns or resides on land that directly overlies any portion of the contamination plume if sampling conducted pursuant to Sections 4.1.6(xiv)(b) and (c) indicates that contaminants have migrated off-site; and
 - e. The owner or operator may demonstrate that a source other than the solid waste management facility caused the contamination or that the statistically significant change resulted from an error in sampling, analysis, or statistical evaluation or from natural variation in groundwater or surface water quality. A report documenting this

demonstration shall be certified by a qualified groundwater scientist and entered in the operating record. If a successful demonstration is made, documented and approved, the owner or operator may continue monitoring as specified in Sections 4.1.6(viii) and (ix); when applicable.

(xvi) If the owner or operator does not make a successful demonstration under Section 4.1.6(xv)(e) within 90 days, the owner or operator shall:

- a. Continue monitor as required by Section 4.1.6(xiv)(d).
- b. Take any interim measures required by the Department or necessary to protect human health and the environment;
- c. Assess potential corrective-action measures appropriate for the current conditions and circumstances of the solid waste management facility. The assessment shall address at least:
 - i. The performance, reliability, ease of implementation, and potential impacts of each potential remedy, including safety impacts, cross-media impacts, and control exposure to residual contamination;
 - ii. The time required to begin and complete each remedy;
 - iii. The costs of implementing each remedy; and
 - iv. Public-health or environmental requirements that may substantially affect implementation of each remedy; and
 - v. Before selecting a remedy, discuss the results of the corrective-measures assessment at a public meeting with interested and affected persons.
- d. Based on the results of the corrective-measures assessment and the comments received at the public meeting, the owner or operator shall select a remedy and submit to the Department.
 - i. The corrective action remedy shall:
 1. Protect human health and the environment;
 2. Use permanent solutions that are within the capabilities of best available technology;
 3. Attain the established groundwater- or surface-water-quality standard;
 4. Control the sources of release to reduce or eliminate, to the maximum extent practicable, further releases of contaminants into the environment that may threaten human health or the

environment; and

5. Be approved by the Department.

- ii. Within 14 days after selecting the remedy, the owner or operator shall submit a report to the Department for approval describing the selected remedy and any amendments, together with an implementation schedule and estimated completion date.

(xvii) Upon approving the selected corrective-action remedy, the Department shall notify the owner or operator and require implementation of the corrective-action plan in accordance with the approved schedule.

- a. The Department may also require closure of the solid waste management facility if the groundwater- or surface-water-quality protection standard is exceeded. In addition, the Department may revoke the facility's permit and require the owner or operator to reapply for a permit.
- b. Based on information developed after implementation of the corrective-action plan, the Department or the owner or operator may determine that the selected remedy is not achieving compliance with the Section 4.1.6(xvi)(d)(i). In that event, the owner or operator shall implement other approved methods or techniques that could practicably achieve compliance.
- c. Upon completion of the remedy, the owner or operator shall notify the Department. The notice shall include a certification signed by the owner or operator and a qualified environmental scientist stating that the concentrations of contaminant constituents have remained below the applicable groundwater- or surface-water-quality protection standards for three years or for an alternative period specified by the Department. Upon Department approval, the owner or operator shall:
 - i. Terminate corrective action measures; and
 - ii. Continue detection monitoring as required by Sections 4.1.6(viii) and (ix).

(xviii) After receiving approval from the Department and any applicable state or federal permitting agency to close the solid waste management facility, the owner or operator shall submit plans for abandoning all monitoring wells for which the facility owner is responsible. Monitoring wells shall be abandoned in accordance with Utah Administrative Code R655-4-14, Abandonment of Wells. The owner or operator shall provide the Department with copies of all well-abandonment reports, plans, and other documentation associated with abandonment of the facility's monitoring wells.

4.2 Haulers.

4.2.1 Permit Requirements and Approval Process.

- (i) **Permits.** A person shall not operate as a hauler without obtaining a valid permit issued by the Department in accordance with this section.
 - a. **Waste Hauler Permit.** A Waste Hauler Permit is required for a hauler who hauls non-liquid, non-infectious solid waste; non-infectious liquid waste; or hauls fifty or more pounds of infectious medical waste per month.
 - i. Infectious medical waste must be managed, stored, transported, and treated in accordance with the requirements set out in Section 4.2.12 of this Regulation.
 - b. **Waste Tire Hauler Permit.** A Waste Tire Hauler Permit is required for a hauler who hauls waste tires.
- (ii) **Exempt Haulers.** The following haulers and persons are exempt from the permit and insurance requirements of Section 4.2.1 and the fee requirements of Section 5 of this Regulation.
 - a. A person who transports asbestos waste and is a properly licensed and permitted as an asbestos contractor.
 - b. A person who hauls 10 or fewer waste tires per month.
 - c. A home healthcare agency that transports fewer than 25 pounds of infectious medical waste in a calendar month to a central location for pick-up and disposal by a permitted infectious medical waste hauler or to a permitted infectious medical waste facility.
 - d. Mobile cleaners.
- (iii) **Permit Application, and Insurance Coverage.**
 - a. **Approved Form.** An application for a permit to operate as a hauler shall be submitted on a Department-approved form.
 - b. **Fees.** To obtain a permit to operate as a hauler under Section 4.2.1(i), an applicant shall submit the applicable application fee required by Section 5.2.1 and the Department's Fee Schedule.
 - c. **Safety Plan.** An applicant for a permit to operate as a hauler shall submit a written safety plan in accordance with Section 4.2.10.
 - d. **Vehicle Inspection.** Upon applying for a permit, an applicant shall make each vehicle used for solid, liquid, or infectious-waste collection

available for inspection by the Department. As part of the vehicle inspection, the applicant shall provide:

- i. The vehicle identification number, make, model, year, and license plate number of each vehicle used for waste collection; and
 - ii. The names and addresses of all locations used for waste disposal.
- e. **Insurance Coverage.** Upon applying for a permit to operate as a waste hauler, an applicant shall provide documentation to the Department indicating that the hauler has obtained the following minimum insurance coverage:
- i. A used oil liquid waste hauler shall obtain waste hauler pollution liability insurance or environmental pollution legal liability coverage for bodily injury and property damage to third parties arising from sudden accidental releases of used oil from its vehicles and other equipment and containers used during transit, loading and unloading. The hauler shall maintain the coverage for the duration of the permit or until released by the Department. The minimum amount of coverage on an occurrence form shall be \$1,000,000 per occurrence with a \$2,000,000 general policy aggregate.
 - ii. Each hauler shall obtain commercial automobile liability insurance covering owned, hired, and non-owned automobiles, in the minimum amount of \$1,000,000 per occurrence.
 - iii. Each hauler shall obtain commercial general liability insurance on an occurrence form in the minimum amount of \$1,000,000 per occurrence with a \$2,000,000 general policy aggregate.
 - iv. Each required insurance policy shall be issued by an insurance company licensed to do business in the State of Utah and either currently rated A- or better by A.M. Best Company; or listed in the United States' Treasury Department's current Listing of Approved Sureties (Department Circular 570), as amended.
 - v. The applicant shall furnish certificates of insurance and any required waste-hauler pollution liability endorsement, in a form acceptable to the Department, upon receipt of permit and thereafter as required by the Department.
 - vi. If any work is subcontracted, the applicant shall require each subcontractor to obtain and maintain the minimum insurance coverage required of the applicant under this section.
 - vii. Each required policy and certificate of insurance shall provide that coverage will not be canceled or modified without 30 days' prior written notice to the Department in a manner approved by the Salt Lake County District Attorney.

4.2.2 Upon Department approval of the permit application and written safety plan, successful completion of the vehicle inspection, and submission of proof of adequate liability coverage, the Department shall issue the following documents to the Waste Hauler applicant:

- (i) An inspection report signed by the Department stating that the vehicle identified in the report has passed inspection; and
- (ii) A receipt showing payment of the permit fee.

4.2.3 **Vehicle Construction.** Each vehicle used by a hauler in the collection or transportation of solid waste shall meet the following requirements:

- (i) The vehicle body shall be clean, easily cleanable, and in good condition and repair;
- (ii) The vehicle body shall be lined with steel and welded at all seams or constructed of other materials approved by the Department;
- (iii) The size capacity of the vehicle body or tank shall be certified by the manufacturer or a size-certification company approved by the Department;
- (iv) The vehicle shall be easily loaded and emptied;
- (v) The vehicle's tailgate or hopper shall be constructed to prevent its contents from spilling or blowing from the vehicle while it is in motion;
- (vi) A heavy-duty canvas or other acceptable heavy-duty cover of sufficient size to cover the open body of the vehicle shall accompany the vehicle;
- (vii) Each vehicle operated under a Waste Hauler Permit as outlined in Section 4.2.1(i)(a) shall be equipped with a fire extinguisher;
- (viii) The name and telephone number of the vehicle's owner and the capacity of the vehicle body or tank shall be permanently affixed on the body in legible letters and numbers at least three inches high;
- (ix) All equipment attached to a vehicle hauling liquid or hazardous waste, including, but not limited to, pumps, hoses, valves, containers, and tanks used to contain or pump the waste, shall be maintained in a water-tight condition and in good repair; and
- (x) The vehicle shall comply with all applicable air pollution and noise control ordinances and regulations.

4.2.4 **Vehicle Maintenance.**

- (i) All equipment used to collect and transport solid waste shall be maintained in good condition and cleaned at a frequency and by a method

approved by the Department to prevent the propagation or attraction of flies, rodents, or other vectors and the creation of a health hazard. Equipment used to collect and transport solid waste, including vehicles, shall be cleaned in accordance with the Utah Water Quality Act.

- (ii) A collection vehicle that fails to meet the requirements of this Regulation shall not be used to collect or transport solid waste until repairs have been made that bring the vehicle into compliance. If the required repairs are not made, the permit issued for the vehicle shall be revoked pursuant to Section 5.5.

4.2.5 Vehicles To Be Used Only for Permitted Purposes. A solid waste collection or transportation vehicle shall be used to collect and transport only the types of solid waste for which the vehicle was designed and approved by the Department when the permit was issued.

4.2.6 Collection and Transportation of Solid Waste. Each hauler shall be responsible for the satisfactory collection and transportation of solid waste to a solid waste management facility or to another facility permitted by the State of Utah or the United States. Each receiving facility shall be authorized to receive such waste and approved by the Department. A hauler shall not:

- (i) Allow vehicle loaded with solid waste to remain standing on any premises, street, road, or highway longer than necessary for loading and transportation, except that solid waste may remain in the vehicle for a longer period during an emergency, including severe weather, equipment failure, or an accident;
- (ii) Collect, haul, or transport solid waste in an open container for a distance of five blocks or more without making a waste-collection stop, unless the waste is completely covered or secured to prevent littering or discharge;
- (iii) Operate any vehicle used to collect and transport solid waste in a manner that allows its contents to be discharged from the vehicle. If a discharge occurs during collection or transportation, the hauler shall immediately pick up the discharged material, return it to the vehicle, and properly clean the affected area;
- (iv) Collect, haul, or transport solid waste, except in a sanitary container or in a vehicle especially constructed for that purpose and operated under valid Department permit; or
- (v) Collect unauthorized solid waste or solid waste that is smoldering, smoking, or burning.

4.2.7 Container Construction, Maintenance, and Placement Requirements.

- (i) Containers shall be constructed of metal, durable plastic, or rubber. Metal containers shall be painted to prevent rust and corrosion.

- (ii) The name and telephone number of the hauler shall be legibly printed on the front or side of each container in letters at least one inch high. Containers provided to dwellings as part of a municipality-wide service may instead use an identification code.
- (iii) Containers shall be equipped with tight-fitting lids or other covers approved by the Department.
- (iv) Containers used for materials other than liquid waste shall be constructed with wide necks and openings and tapered sides to prevent clogging and littering when emptied manually.
- (v) Containers shall be maintained in a clean condition and in good repair, including repainting as necessary to prevent rust and corrosion. If the hauler furnishes containers, the hauler shall be responsible for maintaining them in a clean condition and good repair. The hauler shall have appropriate facilities and equipment to clean and repair the containers or shall arrange for another person to provide those services. The hauler shall coordinate with the property owner, occupant, or both regarding placement of the containers to minimize traffic or other hazards. Containers shall be placed in locations least offensive to adjoining properties and shall not be placed on a parking strip except on the day of collection or stored within three feet of an adjoining property line.
- (vi) Containers emptied by machinery shall be designed and constructed so that they can be emptied without the hauler coming into physical contact with the solid waste.
- (vii) Containers shall be emptied weekly or at another interval approved by the Department.
- (viii) A container that does not meet these requirements shall not be used without Department approval.

4.2.8 Unloading Solid Waste. A hauler shall unload solid waste only at a solid waste management facility. All unloading shall comply with the facility's Department-approved plans and specifications.

4.2.9 Record Keeping and Reporting. Upon request by the Department, a hauler shall report the names and addresses of all businesses and persons from whom the hauler collects solid waste and all locations where the waste is hauled and deposited. The report shall be prepared in the format required by the Department.

4.2.10 Safety Plan and Training. Each hauler shall maintain a written safety plan for the collection, transportation, and disposal of solid waste. Each hauler shall ensure that its personnel are trained in the applicable parts of the safety plan before collecting, transporting, or disposing of solid waste or operating a collection or transportation vehicle. The safety plan and training shall include:

- (i) The proper operation and safety features of the solid waste collection vehicles;
- (ii) Proper methods for collecting, transporting, and unloading solid waste;
- (iii) Requirements governing the collection, transportation, and disposal of solid waste, including the prohibited acts under this Regulation and requirements applicable to each type of solid waste the hauler is permitted to collect and transport;
- (iv) A description and understanding of the characteristics of the solid waste being hauled; and
- (v) Procedures to be followed if:
 - a. Actual or potential injury results from contact with solid waste;
 - b. Solid waste is spilled during collection or transportation, including procedures for containment, cleanup, decontamination, and Department notification;
 - c. Hot or burning solid waste is encountered; or
 - d. Unauthorized waste material is deposited in containers to be collected;
- (vi) Procedures for preventing and responding to emergencies, including:
 - a. The selection and use of safety clothing and equipment;
 - b. Methods of emergency communication.

4.2.11 Additional Requirements Pertaining to Waste Tire Haulers. The waste tire hauler shall prepare the record in triplicate and shall provide one copy to the waste tire generator upon collection and one copy to the landfill or processing facility upon delivery. The waste tire hauler shall retain the third copy for at least five years and provide it to the Department upon request. A waste tire hauler shall maintain a record for each waste tire generator that identifies:

- (i) The number of waste tires collected;
- (ii) The date of collection;
- (iii) The solid waste management facility where the hauler delivered the waste tires; and
- (iv) The date of delivery.

4.2.12 Additional Requirements Pertaining to Infectious Medical Waste Haulers.

- (i) Each side of a vehicle used to collect or transport infectious medical waste shall display a permanently affixed, conspicuous rectangular sign or decal measuring at least 9.8 by 13.8 inches. The sign or decal shall have red lettering on a white background stating “INFECTIOUS WASTE” or “BIOHAZARD” and shall include the international biohazard symbol. Each vehicle hauling more than 25 pounds of infectious medical waste shall display the required signage.
- (ii) Infectious medical waste shall be transported only to a solid waste management facility approved to process or dispose of infectious medical waste.
- (iii) Infectious medical waste shall be transported in a leak-proof, fully enclosed container or vehicle compartment.
- (iv) Infectious medical waste shall not be transported in the same vehicle as other solid waste unless the infectious medical waste is separately contained in rigid reusable containers; barriers separate the infectious medical waste from other waste; or all waste in the vehicle will be treated or disposed of as infectious medical waste in accordance with this Regulation.
- (v) Infectious medical waste shall not be unloaded and reloaded or transferred to another vehicle unless the Department has approved the loading and unloading or the transfer occurs at an infectious medical waste transfer station permitted under Section 4.1.1(i)(a)(v) of this Regulation. The facility shall keep the infectious medical waste in a secured area separate from other waste. If the facility stores the infectious medical waste for more than three hours after unloading, the facility, shall store it in a refrigerated unit capable of maintaining the medical waste at or below 32 degrees Fahrenheit.
- (vi) An employer whose employees manually load or unload containers of infectious medical waste onto or from transport vehicles shall provide and require the use of protective gloves, coveralls, and, when necessary, face shields and respirators. Soiled protective clothing shall be decontaminated or properly disposed of in accordance with Section 4.3 of this Regulation.
- (vii) Any surface of a transport vehicle that comes into contact with infectious medical waste shall be decontaminated.

4.3 Additional Requirements for the Storage, Treatment, and Disposal of Infectious Medical Waste. Sections 4.3.1 through 4.3.3 apply to all persons who process, or dispose of infectious medical waste.

4.3.1 Infectious Medical Waste Storage and Containment

- (i) Infectious medical waste shall be contained in a manner that prevents unsupervised or unauthorized access to the material.

- (ii) Home healthcare agencies that perform medical procedures for residents shall transport all infectious medical waste generated by those procedures to a central location for pick-up and disposal by a permitted infectious medical waste hauler or to a permitted infectious medical waste facility.
- (iii) Infectious medical waste containers shall be leak-proof, have tight-fitting covers, and be kept clean and in good repair.
- (iv) Infectious medical waste shall be stored in a manner that prevents it from providing a breeding place or food source for insects, rodents, or other vectors and from creating a public-health hazard. Containers of infectious medical waste shall be stored in a manner that minimizes odors and shall not be stored in or near patient areas or food-storage or food-preparation areas.
- (v) Medical sharps capable of causing a skin puncture, including but not limited to, syringes and needles, shall be contained for disposal as infectious medical waste in puncture-resistant containers made of metal or rigid plastic that have tight-fitting lids, are completely enclosed, and prevent contact and spillage.
- (vi) Infectious medical waste, other than sharps capable of puncturing or cutting, shall be contained in disposable plastic bags that are impervious to moisture and that have a minimum thickness of 3.0 mils or equivalent tensile strength. The bags and containers shall be securely tied or sealed to prevent leakage during storage, handling, or transportation.
- (vii) All bags and containers used to contain and dispose of infectious medical waste shall be red or, if another color, conspicuously labeled with the words "INFECTIOUS WASTE," the word "BIOHAZARD," or the international infectious waste symbol.
- (viii) Each area in which infectious medical waste is stored shall be labeled with the words "INFECTIOUS WASTE," the "BIOHAZARD," or the international infectious waste symbol.
- (ix) Each generator of infectious medical waste shall maintain a written plan and provide it to its employees. The plan shall describe the types of infectious medical waste handled by the generator; the generator's treatment, storage, and disposal procedures; the procedures to be followed if a person comes into contact with infectious medical waste; and the safety procedures employees must follow when handling infectious medical waste. The generator shall keep the plan on file and make it available to the Department upon request. The Department may verify that employees have been properly trained. The employer shall review and update the plan annually or more frequently when necessary.
- (x) Reusable pails, drums, dumpsters, or bins used to contain infectious medical waste shall not be used for another purpose unless properly decontaminated in accordance with Section 4.3.2 of this Regulation.

- (xi) Infectious medical waste contained in disposable containers shall be placed for storage in disposable or reusable pails, cartons, drums, dumpsters, or portable bins.

4.3.2 Decontamination of Reusable Containers. After being emptied and before each reuse, reusable storage containers contaminated by infectious medical waste shall be thoroughly washed and decontaminated by one of the following methods:

- (i) Exposure to hot water at a temperature of at least 180 degrees Fahrenheit (82 degrees Celsius) for at least 15 seconds;
- (ii) Rinsing with or immersion in one of the following chemical sanitizing solutions for at least three minutes:
 - a. A hypochlorite solution containing 500 milligrams per liter of available chlorine;
 - b. A phenol solution containing 500 milligrams per liter of active agent;
 - c. An iodoform solution containing 100 milligrams per liter of available iodine;
 - d. A quaternary ammonium solution containing 400 milligrams per liter of active agent; or
- (iii) Another method approved by the Department.

4.3.3 Processing, Treatment, and Disposal of Infectious Medical Waste.

- (i) A grinder shall not be used to process infectious medical waste until the waste has been rendered non-infectious. Infectious medical waste contained in bags or other disposal containers shall not be compacted or placed in a portable or mobile trash compactor for storage or transportation.
- (ii) Unless landfilling is the only available alternative, infectious medical wastes consisting of recognizable human anatomical remains or fetal remains shall be disposed of by incineration, cremation, or interment in a cemetery.
- (iii) Unless otherwise approved by the Department, infectious medical waste shall be treated by one of the following methods:
 - a. By incineration in a controlled-air multi-chamber incinerator that meets, at a minimum, the air quality standards and residence times established by the State of Utah and provides complete combustion of the waste into carbonized or mineralized ash. Listed or characteristic hazardous waste shall not be incinerated in an infectious medical waste

incinerator unless such incinerator is also permitted as a hazardous waste incinerator. Radioactive waste shall only be disposed of at a facility approved for radioactive-waste disposal. Infectious medical waste ash may be disposed of as non-infectious solid waste if the ash is not otherwise hazardous.

- b. Heat sterilization in a steam sterilizer or another sterilization technique approved by the Department that renders the waste non-infectious. Minimum operating procedures for steam sterilizers shall include:
 - i. Maintaining written operating procedures for each steam sterilizer that address time, temperature, pressure, types of waste and containers, container closures, loading pattern, water content, and maximum load quantities;
 - ii. Attaining a temperature of 250 degrees Fahrenheit (121 degrees Celsius) for at least 30 minutes, or longer, depending on the quantity and compaction of the load, to sterilize of the entire load. Recording or indicating thermometers shall be checked during each complete cycle to ensure that the required temperature is attained. Thermometers shall be calibrated at least annually and more frequently when necessary;
 - iii. Applying heat-sensitive tape or another device to each container to verify adequate sterilization occurred; and
 - iv. Placing the biological indicator, *Bacillus stearothermophilus* placed at the center of a load at least once every 20 cycles, but no less frequently than once a month, to confirm that adequate sterilization occurred.
- (iv) Unless otherwise approved by the Department, infectious medical waste shall be disposed of by one of the following methods:
 - a. Burial at a landfill approved to accept infectious medical waste, provided the waste is immediately covered with cover material or non-infectious solid waste before compaction to prevent contamination of equipment or persons during subsequent compaction and covering operation.
 - b. Discharge into a sewer system approved by the Department, if the infectious medical waste is liquid and will not remain viable in the sewer system.
- (v) A trash chute shall not be used to transfer infectious medical waste.

5. LICENSES, PERMITS, FINANCIAL ASSURANCE & REGULATORY FEES

- 5.1 The Department may establish and collect appropriate fees for licenses and permits as set out in this Regulation. The Department may collect appropriate fees as set out in this Regulation for the performance of services, including inspections and plan reviews. If information on a license or permit application changes, the applicant shall notify the Department in writing within 20 calendar days.
- 5.2 Unless otherwise provided or omitted, solid waste management facilities and haulers required to obtain a permit pursuant to Section 4.1.1 of this Regulation shall pay the applicable fees. The permit fee is due upon permit application and, if so stated, is due annually thereafter. The tonnage fee is due quarterly on the 25th day of January, April, July, and October.
- 5.2.1 Application and Permit Fees. The Application and Permit fees for solid waste management facilities and haulers are listed in the Department's Fee Schedule.
- (i) **Municipal Waste Permit Fee.** A Municipal Waste Permit Fee shall be paid by applicants for a permit issued pursuant to Sections 4.1.1(i)(a)(i) and (b)(i) upon permit application in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
 - (ii) **Construction and Demolition Waste Permit Fee.** A Construction and Demolition Waste Permit Fee shall be paid by applicants for a permit issued pursuant to Sections 4.1.1(i)(a)(ii) and (b)(ii) upon permit application in an amount as provided for or as approved by the Director in the Department's Fee Schedule
 - (iii) **Monofill Permit Fee.** A Monofill Permit Fee shall be paid by applicants for a permit issued pursuant to Section 4.1.1(i)(b)(iii) upon permit application in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
 - (iv) **Liquid Waste Processing Facility Permit Fee.** A Liquid Waste Processing Facility Permit Fee shall be paid by applicants for a permit issued pursuant to Section 4.1.1(i)(a)(iii) upon permit application in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
 - (v) **Waste Tire Storage Facility Permit Fee.** A Waste Tire Storage Facility Permit Fee shall be paid by applicants for a permit issued pursuant to Section 4.1.1(i)(a)(iv) upon permit application and annually thereafter in an amount as provided for or as approved by the Director in the Department's Fee Schedule
 - (vi) **Waste Hauler Permit Fee.** A Waste Hauler Permit Fee shall be paid by applicants for a permit issued pursuant to Section 4.2.1(i)(a) upon permit application in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
 - (vii) **Infectious Medical Waste Facility Permit Fee for Storage or Transfer.** An Infectious Medical Waste Facility Permit Fee for Storage or Transfer

shall be paid by applicants for a permit issued pursuant to Section 4.1.1(i)(a)(v) upon permit application and annually thereafter.

- (viii) **Infectious Medical Waste Treatment Facility Permit Fee.** An Infectious Medical Waste Treatment Facility Permit shall be paid by applicants for a permit issued pursuant to Section 4.1.1(i)(a)(vi). upon permit application and annually thereafter in an amount as provided for or as approved by the Director in the Department's Fee Schedule
- (ix) **Recycling or Private Solid Waste Management Facility Permit Fee.** A Recycling or Private Solid Waste Management Facility Permit Fee shall be paid by applicants for a permit issued pursuant to Sections 4.1.1(i)(a)(vii) and (b)(iv) upon permit application and annually thereafter in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
- (x) **Waste Tire Hauler Permit Fee.** A Waste Tire Hauler Permit Fee shall be paid by applicants for a permit issued pursuant to Section 4.2.1(i)(b) upon permit application in an amount as provided for or as approved by the Director in the Department's Fee Schedule.

5.2.2 Tonnage Fees:

- (i) **Municipal Waste Permit Tonnage Fee** – Owners or operators of solid waste management facilities permitted pursuant to Sections 4.1.1(i)(a)(i) and (b)(i) shall pay a tonnage fee in an amount as provided for or as approved by the Director in the Department's Fee Schedule. Processing Facilities permitted pursuant to Section 4.1.1(i)(a)(i) are exempt from paying this fee on solid waste transferred for disposal inside Salt Lake County. Tonnage fees shall be accompanied by documentation verifying the amount of tonnage received during that quarter.
- (ii) **Construction and Demolition Waste Permit Tonnage Fee** – Owners or operators of solid waste management facilities permitted pursuant to Sections 4.1.1(i)(a)(ii) and (b)(ii) shall pay a tonnage fee in an amount as provided for or as approved by the Director in the Department's Fee Schedule Processing Facilities permitted pursuant to Section 4.1.1(i)(a)(ii) are exempt from paying this fee on solid waste transferred for disposal inside Salt Lake County. Tonnage fees shall be accompanied by documentation verifying the amount of tonnage received during that quarter.
- (iii) **Monofill Permit Tonnage Fee** – Monofill Permit holders shall pay a tonnage fee in an amount as provided for or as approved by the Director in the Department's Fee Schedule. Tonnage fees shall be accompanied by documentation verifying the amount of tonnage received during that quarter.
- (iv) **Liquid Waste Processing Facility Permit Tonnage Fee** – Liquid Waste Processing Facility Permit holders shall pay a tonnage fee in an amount as

provided for or as approved by the Director in the Department's Fee Schedule. Tonnage fees shall be accompanied by documentation verifying the amount of tonnage received during that quarter.

5.3 Late Fees and Follow-Up Inspection Fees.

- 5.3.1 The Department may impose upon any party subject to this Regulation penalties and charges for failure to timely pay service and license or permit fees as set out in this Regulation. Attorney's fees and collection fees may also be assessed.
- 5.3.2 Fees unpaid to the Health Department after one month of the due date will be assessed a penalty of 10% of the outstanding balance. Fees and additional charges unpaid after two months of the due date will be assessed an additional penalty of 15% of the outstanding balance, including previous penalties. Fees and additional charges unpaid after 100 days of the due date will result in suspension of the permit and the right to operate. A charge will be assessed for each returned check.
- 5.3.3 **Solid Waste Management Facility Follow-Up Inspection Fee.** The Department will charge a follow-up fee to a Solid Waste Management Facility Permit holder when conditions found during an inspection require a follow-up inspection to ensure compliance in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
- 5.3.4 **Hauler Follow-Up Inspection Fee.** The Department will charge a follow-up fee to a Hauler Permit holder when conditions found during an inspection require a follow-up inspection to ensure compliance in an amount as provided for or as approved by the Director in the Department's Fee Schedule.
- 5.4 Unless otherwise provided for in this Regulation or approved by the Department in the Department's Fee Schedule, all fees collected by the Department are non-refundable. All licenses and permits issued by the Department are non-transferable.
- 5.5 **Denial, Suspension, or Revocation of Approval or Permit.** Any permit applied for or issued under this Regulation may be denied, suspended, or revoked by the Department for any of the following reasons:
 - 5.5.1 Failure of the reports, plans, or specifications to show the solid waste management facility will be constructed, operated, or maintained in accordance with the requirements and standards of this Regulation;
 - 5.5.2 Submission of incorrect or false information in the application, reports, plans, or specifications;
 - 5.5.3 Failure to construct, operate, or maintain the solid waste management facility, site, or vehicle in accordance with the application, reports, plans, and specifications approved by the Department;

- 5.5.4 Operation of the solid waste management facility, site, business, or vehicle in a way that causes or creates a hazard to the public health, safety, or welfare;
- 5.5.5 Violation of any rule or regulation, restriction, or requirement adopted by the Department;
- 5.5.6 Violation of any condition on which the permit was issued;
- 5.5.7 Failure to pay to the Department the permit or tonnage fees required in Section 5.2;
- 5.5.8 Failure to provide or maintain the financial assurance as required in Section 4.1.1(iii);
- 5.5.9 Failure of the owner or operator of a solid waste management facility to permit or allow the Department to conduct inspections or obtain samples as necessary to determine compliance with this Regulation; or
- 5.5.10 Previous history of non-compliance with any local, state or federal environmental law, or previous revocation or permanent suspension of any permit issued under any local, state, or federal environmental law.
- 5.5.11 Failure to pay all charges, including late fees after 100 days of the due date.
- 5.5.12 The Department may deny the application of a person for a new facility if the person owns or operates or has responsibility for an existing facility that is in violation of this Regulation.

6. INSPECTIONS & INVESTIGATIONS

6.3 To ensure compliance, the Department conduct inspections, investigations, reviews, and other actions as necessary.

6.4 Authority for Department to Enter Premises.

6.4.1 **Regulated Commercial Premises.** Upon presenting proper identification, authorized representatives of the Department may enter premises regulated by the Department to conduct routine inspections for compliance with rules, standards, regulations, and ordinances adopted by the Department, the Departments of Health & Environmental Quality, or the Division of Occupational and Professional Licensing.

6.4.2 **Consent by License or Permit:** The Department may require permittees to allow access for inspections as part of their permit. Failure to provide access for inspections as set out in the permit may result in the suspension or revocation of the permit.

6.5 The owner or other responsible person may request information gathered by the Department during an investigation, inspection or review as authorized by the Government Records Access and Management Act (GRAMA), Utah Code § 63G-2.

6.6 Pre-open and Construction Inspection. Upon completion of construction of a processing facility and prior to its initial operation, the Department shall be notified so an inspection may be made of the facility to determine conformance with the approved plan and with the applicable provisions of this Regulation. Performance tests of the processing facility may be required by the Department. A report covering the results of any performance tests shall be prepared by the design engineer of the project and submitted to the Department with a copy of all supporting data.

7. ENFORCEMENT MECHANISMS. If the Department has investigated or inspected any property or facility and believes the property owner or other responsible party is in violation of this Regulation or the Department has other reasonable grounds to believe that there has been a violation of any part of this Regulation or that the property owner or otherwise responsible party is not in compliance with this Regulation, the Department may take civil enforcement action as authorized by statute, rule, ordinance, and regulation and may also refer the matter for criminal prosecution. Civil enforcement may involve court or administrative actions, injunctive actions, and closures and may involve cost recovery, penalties, and other remedies. Civil and criminal actions may be brought simultaneously. A person does not need to be first adjudged liable in a civil matter before facing criminal charges. Similarly, a party need not be charged with and/or found guilty of criminal charges to be cited civilly and/or administratively.

7.1 Civil Enforcement Actions. The Department may request the District Attorney bring an action to restrain or enjoin actions in violation of public health, environmental laws, and other laws or abate conditions in violation of such laws.

7.2 Criminal Enforcement Actions. The Department may recommend criminal prosecution for environmental violations either alone or in conjunction with civil enforcement. Criminal prosecutions for environmental violations of state or federal law may be filed by the District Attorney, Utah Attorney General, United States Department of Justice, or other enforcement entity. Factors that the Department may consider in recommending criminal enforcement include the following factors and any other relevant factors:

- 7.2.1 The nature and seriousness of the offense including the immediacy of the threat of danger to the life or safety of another or the harm or threatened harm to human health or environment;
- 7.2.2 The degree to which the violation was designed to provide economic gain or cost avoidance or it involved a pattern of conduct or a common attitude of illegal conduct;
- 7.2.3 The degree to which the offender is a known violator and has avoided prior actions by the department;
- 7.2.4 The degree to which prosecution might deter future violations;
- 7.2.5 The person's actual culpability in connection with the offense including the presence in connection with the offense including the presence of criminal intent;

- 7.2.6 The person's willingness to cooperate in the investigation including whether the violator has attempted to conceal evidence or prosecution of others;
- 7.2.7 The appropriateness of referring the case to other agencies having prosecutorial interest; and
- 7.2.8 Possibilities of civil remedies which would be more appropriate than initiating the criminal justice process.

7.3 **Administrative Actions.**

- 7.3.1 The Department may, at its discretion, issue a Notice of Violation & Order of Compliance (NOV).
- 7.3.2 **Service of NOV.** The Department may provide notice to the owner of the property or otherwise responsible person by sending the NOV via mail to the last known address of the owner of the property or other responsible person. If notice is returned undeliverable, the owner of the property or other responsible person may be personally served or be given notice by other methods reasonably calculated to give actual notice to the owner or other responsible party.
- 7.3.3 **Contents of NOV.** The NOV shall:
 - (i) Describe the property and the persons believed to be in violation;
 - (ii) Describe the violation;
 - (iii) Describe remedial action that will comply with the provisions of this Regulation;
 - (iv) Set a reasonable time for the performance of any required remedial action(s);
 - (v) Describe the procedure to contest the NOV and the time limits for such a contest; and
 - (vi) Notify the owner or other responsible person that if no written contest is filed within the time required, the NOV will become final and unappealable to any administrative entity or court.
- 7.3.4 **Challenging an NOV.** As detailed in the Department's Adjudicative Hearing Procedures, a party aggrieved by an NOV may request a departmental conference, or departmental appeal in writing within 10 days of the date of the NOV.
- 7.3.5 **Departmental Conference, Settlement Agreements, and Stipulations & Orders.**

- (i) After issuance of the NOV, the alleged violator has the option to request and attend a Departmental Conference to discuss the NOV and settlement with the Department. No hearing officer will be present. The process of requesting a Departmental Conference is more fully described in the Department's Adjudicative Hearing Procedures.
- (ii) If the parties agree to a settlement, the Department will prepare, in conjunction with the District Attorney's Office, a binding Settlement Agreement or Stipulation & Consent Order which may require the payment of penalties and the costs of investigation. Parties may also agree to a settlement at any time subsequent to the Departmental Conference. After signing a Settlement Agreement or Stipulation & Consent Decree, the parties waive all rights to further department and court hearings or appeals. Settlement Agreements or Stipulation & Consent orders may be enforced in state courts.

7.3.6 Hearings & Appeals. Parties Aggrieved by an NOV may also request a Departmental Appeal. A hearing officer is present at these proceedings and makes a written determination. The methods of challenging an NOV are more fully described in the Department's Adjudicative Hearing Procedures. Departmental Appeal Orders may be appealed to the entities and within the time limits set out in the Department's Adjudicative Hearing Procedures.

7.3.7 Failing to respond to an NOV. If a party fails to respond to an NOV within the required time, the NOV becomes a final order unappealable to any administrative entity or court. The Department may then enforce the order in state court.

7.4 Additional Administrative Enforcement Authority.

7.4.1 The Department may declare unsanitary conditions a hazard and cause every hazard affecting the public health to be abated.

7.4.2 Any variances allowed by the Department to the requirements of this Regulation shall be only by written approval of the Board.

7.4.3 Emergency Enforcement. If the Director finds that an emergency exists that requires immediate action to protect the public health, the Director may without notice or hearing issue an order declaring the existence of an emergency and requiring that action be taken as he deems necessary to meet the emergency. The order shall be effective immediately. Any person to whom the order is directed shall comply and abate the health hazard immediately but may petition the Director for a hearing in accordance with the Department's Adjudicative Hearing Procedures. After the hearing and depending upon the findings as to whether the person has complied with the provisions of this Regulation, the Director shall continue the order in effect or modify or revoke it. If circumstances warrant because of the seriousness of the hazard, the Department may act to correct or abate the emergency without issuance of an order or directive or without waiting for the expiration of compliance time previously given in an order.

8. CRIMINAL, CIVIL & ADMINISTRATIVE PENALTIES.

8.1 Criminal Penalties.

- 8.1.1 Any person who is found guilty by a court of violating any of the provisions of this Regulation, either by failing to do the acts required herein or by doing a prohibited act, is guilty of a class B misdemeanor, pursuant to Utah Code § 26A-1-123.
- 8.1.2 Each day such violation is committed or permitted to continue shall constitute a separate violation.
- 8.1.3 Each similar subsequent violation occurring within two years of the initial violation may constitute a class A misdemeanor.

8.2 Civil and Administrative Penalties.

- 8.2.1 Penalties may be included in a Settlement Agreement or Stipulation & Consent Order. Penalties may be assessed according to the following factors:
 - (i) The violator's history of compliance or non-compliance;
 - (ii) The violator's economic benefit of non-compliance;
 - (iii) The documented costs associated with environmental or health damage;
 - (iv) The violator's degree of willfulness or negligence; and
 - (v) The violator's good faith efforts to comply and cooperate.
- 8.2.2 The Director may multiply the penalty by the number of days the violation occurred.

8.3 Recovery of Investigation & Abatement Costs.

- 8.3.1 The Department may recover its inspection, investigative and abatement expenses and costs from owners or other responsible person.
- 8.3.2 The Department may record a judgment lien on a violator's property to recover its expenses and costs.

9. EFFECTIVE DATE.

- 9.1 This Regulation shall become effective upon its adoption by the Salt Lake County Board of Health.

APPROVED AND ADOPTED this _____ day of _____, 2026.

SALT LAKE COUNTY BOARD OF HEALTH

By: _____
Rusty Vetter, JD, Chair

ATTEST:

By: _____
DOROTHY ADAMS, MPA, LEHS
Executive Director
Salt Lake County Health Department