



Kansas Statutes Annotated

Chapter 65-Public Health
Article 34-Solid Waste

and

Administrative Regulations

Article 29-Solid Waste

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Kansas Department of Health and Environment
Bureau of Waste Management

Kansas Statutes Annotated and Administrative Regulations
Solid Waste Management

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Kansas Statutes Annotated

Article 34. Solid and Hazardous Waste

65-3401. Statement of policy. It is hereby declared that protection of the health and welfare of the citizens of Kansas requires the safe and sanitary disposal of solid wastes. The legislature finds that the lack of adequate state regulations and control of solid waste and solid waste management systems has resulted in undesirable and inadequate solid waste management practices that are detrimental to the health of the citizens of the state; degrade the quality of the environment; and cause economic loss. For these reasons it is the policy of the state to:

(a) Establish and maintain a cooperative state and local program of planning and technical and financial assistance for comprehensive solid waste management.

(b) Utilize the capabilities of private enterprise as well as the services of public agencies to accomplish the desired objectives of an effective solid waste management program.

(c) Require a permit for the operation of solid waste processing and disposal systems.

(d) Achieve and maintain status for the Kansas department of health and environment as an approved state agency for the purpose of administering federal municipal solid waste management laws and regulations.

(e) Encourage the wise use of resources through development of strategies that reduce, reuse and recycle materials. **History:** L. 1970, ch. 264, § 1; L. 1992, ch. 316, § 1; L. 1997, ch. 140, § 1; July 1.

65-3402. Definitions. As used in this act, unless the context otherwise requires:

(a) "**Solid waste**" means garbage, refuse, waste tires as defined by K.S.A. 65-3424, and amendments thereto, and other discarded materials, including, but not limited to, solid, semisolid, sludges, liquid and contained gaseous waste materials resulting from industrial, commercial, agricultural and domestic activities. Solid waste does not include hazardous wastes as defined by subsection (f) of K.S.A. 65-3430, and amendments thereto, recyclables or the waste of domestic animals as described by subsection (a)(1) of K.S.A. 65-3409, and amendments thereto.

(b) "**Solid waste management system**" means the entire process of storage, collection, transportation, processing, and disposal of solid wastes by any person engaging in such process as a business, or by any state agency, city, authority, county or any combination thereof.

(c) "**Solid waste processing facility**" means incinerator, composting facility, household hazardous waste facility, waste-to-energy facility, transfer station, reclamation facility or any other location where solid wastes are consolidated, temporarily stored, salvaged or otherwise processed prior to being transported to a final disposal site. This term does not include a scrap material recycling and processing facility.

(d) "**Solid waste disposal area**" means any area used for the disposal of solid waste from more than one residential premises, or one or more commercial, industrial, manufacturing or municipal operations. "Solid waste disposal area" includes all property described or included within any permit issued pursuant to K.S.A. 65-3407, and amendments thereto.

(e) "**Person**" means individual, partnership, firm, trust, company, association, corporation, individual or individuals having controlling or majority interest in a corporation, institution, political subdivision, state agency or federal department or agency.

(f) "**Waters of the state**" means all streams and springs, and all bodies of surface or groundwater, whether natural or artificial, within the boundaries of the state.

(g) "**Secretary**" means the secretary of health and environment.

(h) "**Department**" means the Kansas department of health and environment.

(i) "**Disposal**" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any water.

(j) **"Open dumping"** means the disposal of solid waste at any solid waste disposal area or facility which is not permitted by the secretary under the authority of K.S.A. 65-3407, and amendments thereto, or the disposal of solid waste contrary to rules and regulations adopted pursuant to K.S.A. 65-3406, and amendments thereto.

(k) **"Generator"** means any person who produces or brings into existence solid waste.

(l) **"Monitoring"** means all procedures used to (1) systematically inspect and collect data on the operational parameters of a facility, an area or a transporter, or (2) to systematically collect and analyze data on the quality of the air, groundwater, surface water or soils on or in the vicinity of a solid waste processing facility or solid waste disposal area.

(m) **"Closure"** means the permanent cessation of active disposal operations, abandonment of the disposal area, revocation of the permit or filling with waste of all areas and volume specified in the permit and preparing the area for the long-term care.

(n) **"Postclosure"** means that period of time subsequent to closure of a solid waste disposal area when actions at the site must be performed.

(o) **"Reclamation facility"** means any location at which material containing a component defined as a hazardous substance pursuant to K.S.A. 65-3452a, and amendments thereto, or as an industrial waste pursuant to this section is processed.

(p) **"Designated city"** means a city or group of cities which, through interlocal agreement with the county in which they are located, is delegated the responsibility for preparation, adoption or implementation of the county solid waste plan.

(q) **"Nonhazardous special waste"** means any solid waste designated by the secretary as requiring extraordinary handling in a solid waste disposal area.

(r) **"Recyclables"** means any materials that will be used or reused, or prepared for use or reuse, as an ingredient in an industrial process to make a product, or as an effective substitute for a commercial product. "Recyclables" includes, but is not limited to, paper, glass, plastic, municipal water treatment residues, as defined by K.S.A. 65-163, and amendments thereto, and metal, but does not include yard waste.

(s) **"Scrap material processing industry"** means any person who accepts, processes and markets recyclables.

(t) **"Scrap material recycling and processing facility"** means a fixed location that utilizes machinery and equipment for processing only recyclables.

(u) **"Construction and demolition waste"** means solid waste resulting from the construction, remodeling, repair and demolition of structures, roads, sidewalks and utilities; untreated wood and untreated sawdust from any source; treated wood from construction or demolition projects; small amounts of municipal solid waste generated by the consumption of food and drinks at construction or demolition sites, including, but not limited to, cups, bags and bottles; furniture and appliances from which ozone depleting chlorofluorocarbons have been removed in accordance with the provisions of the federal clean air act; solid waste consisting of motor vehicle window glass; and solid waste consisting of vegetation from land clearing and grubbing, utility maintenance, and seasonal or storm-related cleanup. Such wastes include, but are not limited to, bricks, concrete and other masonry materials, roofing materials, soil, rock, wood, wood products, wall or floor coverings, plaster, drywall, plumbing fixtures, electrical wiring, electrical components containing no hazardous materials, nonasbestos insulation and construction related packaging. "Construction and demolition waste" shall not include waste material containing friable asbestos, garbage, furniture and appliances from which ozone depleting chlorofluorocarbons have not been removed in accordance with the provisions of the federal clean air act, electrical equipment containing hazardous materials, tires, drums and containers even though such wastes resulted from construction and demolition activities. Clean rubble that is mixed with other construction and demolition waste during demolition or transportation shall be considered to be construction and demolition waste.

(v) **"Construction and demolition landfill"** means a permitted solid waste disposal area used exclusively for the disposal on land of construction and demolition wastes. This term shall not include a site that is used exclusively for the disposal of clean rubble.

(w) "**Clean rubble**" means the following types of construction and demolition waste: Concrete and concrete products including reinforcing steel, asphalt pavement, brick, rock and uncontaminated soil as defined in rules and regulations adopted by the secretary.

(x) "**Industrial waste**" means all solid waste resulting from manufacturing, commercial and industrial processes which is not suitable for discharge to a sanitary sewer or treatment in a community sewage treatment plant or is not beneficially used in a manner that meets the definition of recyclables. Industrial waste includes, but is not limited to: Mining wastes from extraction, beneficiation and processing of ores and minerals unless those minerals are returned to the mine site; fly ash, bottom ash, slag and flue gas emission wastes generated primarily from the combustion of coal or other fossil fuels; cement kiln dust; waste oil and sludges; waste oil filters; and fluorescent lamps.

(y) "**Composting facility**" means any facility that composts wastes and has a composting area larger than one-half acre.

(z) "**Household hazardous waste facility**" means a facility established for the purpose of collecting, accumulating and managing household hazardous waste and may also include small quantity generator waste or agricultural pesticide waste, or both. Household hazardous wastes are consumer products that when discarded exhibit hazardous characteristics.

(aa) "**Waste-to-energy facility**" means a facility that processes solid waste to produce energy or fuel.

(bb) "**Transfer station**" means any facility where solid wastes are transferred from one vehicle to another or where solid wastes are stored and consolidated before being transported elsewhere, but shall not include a collection box provided for public use as a part of a county-operated solid waste management system if the box is not equipped with compaction mechanisms or has a volume smaller than 20 cubic yards.

(cc) "**Municipal solid waste landfill**" means a solid waste disposal area where residential waste is placed for disposal. A municipal solid waste landfill also may receive other nonhazardous wastes, including commercial solid waste, sludge and industrial solid waste.

(dd) "**Construction related packaging**" means small quantities of packaging wastes that are generated in the construction, remodeling or repair of structures and related appurtenances. "Construction related packaging" does not include packaging wastes that are generated at retail establishments selling construction materials, chemical containers generated from any source or packaging wastes generated during maintenance of existing structures.

(ee) "**Industrial facility**" includes all operations, processes and structures involved in the manufacture or production of goods, materials, commodities or other products located on, or adjacent to, an industrial site and is not limited to a single owner or to a single industrial process. For purposes of this act, it includes all industrial processes and applications that may generate industrial waste which may be disposed at a solid waste disposal area which is permitted by the secretary and operated for the industrial facility generating the waste and used only for industrial waste. **History:** L. 1970, ch. 264, § 2; L. 1974, ch. 352, § 156; L. 1977, ch. 221, § 1; L. 1979, ch. 202, § 1; L. 1981, ch. 251, § 21; L. 1992, ch. 316, § 2; L. 1993, ch. 274, § 1; L. 1994, ch. 283, § 1; L. 1995, ch. 221, § 1; L. 1997, ch. 140, § 2; L. 2001, ch. 127, § 1; L. 2002, ch. 121, § 1; L. 2005, ch. 25, § 1; L. 2006, ch. 53, § 1; April 6.

65-3403. History: L. 1970, ch. 264, § 3; Repealed, L. 1974, ch. 352, § 189; July 1.

65-3404. History: L. 1970, ch. 264, § 4; L. 1974, ch. 348, § 30; L. 1974, ch. 352, § 157; Repealed, L. 1977, ch. 221, § 9; April 9.

65-3405. Solid waste management plan required; solid waste management committee; process for adoption and revision of plan; contents of plan. (a) Each county of this state, or a designated city, shall submit to the secretary a workable plan for the management of solid waste in such county. The plan developed by each county or designated city shall be adopted by the governing body of such county or designated city if so authorized. Two or more counties, by interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq., and amendments thereto, may develop and adopt a regional plan in lieu of separate county plans.

(b) There shall be established in each county or group of counties cooperating in a regional plan a solid waste management committee. A county which cooperates in a regional plan may establish its own county committee in addition to cooperating in the required regional committee. A county which does not cooperate in a regional plan may designate, by interlocal agreement, a city as the solid waste management planning authority for the county. Subject to the requirements of this section, the membership of the committee, the terms of committee members, the organization of the committee and selection of its officers shall be determined by the county or counties by interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq., and amendments thereto. The number of members on the committee, whether an individual county committee or a regional committee, shall be not fewer than five or a number equal to the total number of counties cooperating in the regional plan, whichever is more, and shall not exceed 30. The membership shall include: (1) Representatives of incorporated cities located in the county or counties, not to exceed five members representing any cities of the first class, three members representing any cities of the second class and one member representing any cities of the third class; (2) one representative of unincorporated areas of the county or counties; (3) representatives of the general public, citizen organizations, private industry, any private solid waste management industry operating in the county or counties and any private recycling or scrap material processing industry operating in the county or counties; (4) the recycling coordinator, if any, of the county or counties; and (5) any other persons deemed appropriate by the county, designated city or groups of counties, including, but not limited to, county commissioners, county engineers, county health officers and county planners. Members of the committee shall be appointed by the board of county commissioners or governing body of the designated city or by agreement of the boards of county commissioners cooperating in the plan. A county commissioner shall not be appointed to a regional planning committee unless one or more other noncommissioners also represent the commissioner's county on the committee. A regional planning committee shall include at least one representative of each county in the region. Persons appointed to an individual county planning committee in a county covered by a regional plan may also serve on a regional planning committee. Members appointed to represent cities shall be nominated by the mayor of the city represented, or by agreement of all mayors of the cities represented if more than one city of the class is located in the county or counties. If the nominee is not appointed or rejected within 30 days after nomination, the nominee shall be deemed appointed.

(c) The solid waste management committee, whether an individual county committee or a regional committee, shall: (1) Be responsible for the preparation of the solid waste management plan of the individual county or group of counties; (2) review the plan at least annually; and (3) provide to the county commissioners of the individual county or group of counties served by the plan a report containing the results of the annual plan reviews, including recommendations for revisions to the plan. Annual plan reviews which take place in years when county commissions are scheduled to carry out five-year public hearings in accordance with subsection (d) shall comprehensively evaluate the adequacy of the plan with respect to all criteria established by subsection (j). The responsibilities of a solid waste management committee established in a county which cooperates in a regional plan are to be determined by the county commission of such county.

(d) Each county commission shall: (1) Review the county or regional solid waste management plan, the annual review report and any proposed revisions of the plan prepared by the solid waste management committee; (2) adopt the solid waste management plan or proposed revisions to the plan prepared by the solid waste management committee as submitted or as revised by the county commission, except as provided by subsection (g) for regional plans; (3) at least every five years hold a public hearing on the county or regional solid waste management plan, including a review of projected solid waste management practices and needs for a 10-year planning period; (4) notify the department that the solid waste management committee has completed each annual review and each five-year public hearing and that the commission has adopted the plan or review, except as provided in subsection (g) for regional plans; (5) submit with the annual notification a list of solid waste management committee members representing the county on an individual county committee or a regional committee; and (6) review permit applications for solid waste processing facilities and solid waste disposal areas submitted to the department pursuant to K.S.A. 65-3407, and amendments thereto, to determine consistency of the proposed facility with the county or regional plan and to certify that the area is properly zoned or compatible with surrounding land uses. County commissions may utilize the annual plan review reports prepared by solid waste management committees as the basis for the required five-year public hearings.

(e) The county commission of each county which has completed an individual county solid waste plan shall convene an annual meeting of the county solid waste management committee to review the plan. If a quorum of the solid waste management committee is not present, the county commission may independently complete the annual review required in subsection (c).

(f) The county commission of a county which has completed an individual county solid waste management plan may choose to revise its plan at a time which does not coincide with a scheduled annual review by the county solid waste management committee. In such a case, the county commission shall convene a meeting of the solid waste management committee to review the commission's proposed changes and obtain committee comments and recommendations for plan revision. If a quorum of the solid waste management committee is not present, the county commission may independently revise and adopt the county solid waste management plan. The aforementioned meeting shall include an opportunity for public input.

(g) A regional solid waste management committee shall meet annually to review the regional solid waste management plan. The recommendations of the regional committee shall be distributed to the county commissioners of each county cooperating in the regional plan. Each county commission shall either: (1) Adopt the regional committee report, including any proposed plan revisions, and submit the record of adoption back to the regional committee; or (2) submit comments back to the regional committee. Following the adoption of the annual review report by every county in the region, the regional committee shall notify the department that the annual review or five-year update has been completed.

(h) The county commission of a county which cooperates in a regional solid waste management plan may choose to revise its plan at a time which does not coincide with a scheduled annual review by the regional solid waste management committee. At such time, the provisions of the interlocal agreement shall establish protocols for addressing the needs of the county seeking the change in the regional plan.

(i) Each county or group of counties is required to adopt and implement a solid waste management plan pursuant to this section and is responsible for continued and ongoing planning for systematic solid waste management within the boundaries of such county or group of counties. The solid waste management plan of each county, designated city or group of counties shall provide for a solid waste management system plan to serve all generators of solid waste within the county or group of counties.

(j) Every plan shall:

(1) Delineate areas within the jurisdiction of the political subdivision or subdivisions where waste management systems are in existence and areas where the solid waste management systems are planned to be available within a 10-year period.

(2) Conform to the rules and regulations, standards and procedures adopted by the secretary for implementation of this act.

(3) Provide for solid waste management systems in a manner consistent with the needs and plans of the whole area, and in a manner which will not contribute to pollution of the waters or air of the state, nor constitute a public nuisance and shall otherwise provide for the safe and sanitary disposal of solid waste.

(4) Conform with existing comprehensive plans, population trend projections, engineering and economics so as to delineate with practicable precision those portions of the area which may reasonably be expected to be served by a solid waste management system within the next 10 years.

(5) Take into consideration existing acts and regulations affecting the development, use and protection of air, water or land resources.

(6) Establish a time schedule and revenue schedule for the development, construction and operation of the planned solid waste management systems, together with the estimated cost thereof.

(7) Describe the elements of the plan which will require public education and include a plan for delivering such education.

(8) Include such other reasonable information as the secretary requires.

(9) Establish a schedule for the reduction of waste volumes taking in consideration the following: (A) Source reduction; (B) reuse, recycling, composting; and (C) land disposal.

(10) Take into consideration the development of specific management programs for certain wastes, including but not limited to lead acid batteries, household hazardous wastes, small quantities of hazardous waste, white goods containing chlorofluorocarbons, pesticides and pesticide containers, motor oil, consumer

electronics, medical wastes, construction and demolition waste, seasonal clean-up wastes, wastes generated by natural disasters and yard waste.

(k) The plan and any revision of the plan shall be reviewed by appropriate official planning agencies within the area covered by the plan for consistency with programs of comprehensive planning for the area. All such reviews shall be transmitted to the secretary with the proposed plan or revision.

(l) The secretary is hereby authorized to approve or disapprove plans for solid waste management systems, or revisions of such plans, submitted in accordance with this act. If a plan or revision is disapproved, the secretary shall furnish any and all reasons for such disapproval, and the county or group of counties whose plan or revision is disapproved may request a hearing before the secretary in accordance with K.S.A. 65-3412, and amendments thereto.

(m) The secretary is authorized to provide technical assistance to counties or designated cities in coordinating plans for solid waste management systems required by this act, including revisions of such plans.

(n) The secretary may recommend that two or more counties adopt, submit and implement a regional plan rather than separate county plans.

(o) The secretary may institute appropriate action to compel submission of plans or plan revisions in accordance with this act and the rules and regulations, standards and procedures of the secretary.

(p) Upon approval of the secretary of a solid waste management plan, the county or designated city is authorized and directed to implement the provisions contained in the plan.

(q) A county cooperating in a regional solid waste management plan may withdraw from such plan only:

(1) In accordance with the terms of the interlocal agreement adopting the old plan or upon revision or termination of such agreement to permit withdrawal and upon a determination by the secretary that the existing regional solid waste management plan will not be significantly affected by the withdrawal; or

(2) if two or more revised solid waste management plans are prepared and submitted to the department for review and approval addressing solid waste management in counties which have decided to plan individually or in any newly formed regions. **History:** L. 1970, ch. 264, § 5; L. 1974, ch. 352, §158; L. 1992, ch. 316, § 3; L. 1997, ch. 140, § 3; L. 2002, ch. 79, § 1; July 1.

65-3406. Duties and functions of secretary; rules and regulations; exemption of certain solid waste disposal areas from certain requirements. (a) The secretary is authorized and directed to:

(1) Adopt such rules and regulations, standards and procedures relative to solid waste management as necessary to protect the public health and environment, prevent public nuisances and enable the secretary to carry out the purposes and provisions of this act.

(2) Report to the legislature on further assistance needed to administer the solid waste management program.

(3) Administer the solid waste management program pursuant to provisions of this act.

(4) Cooperate with appropriate federal, state, interstate and local units of government and with appropriate private organizations in carrying out duties under this act.

(5) Develop a statewide solid waste management plan.

(6) Provide technical assistance, including the training of personnel to cities, counties and other political subdivisions.

(7) Initiate, conduct and support research, demonstration projects and investigations and coordinate all state agency research programs with applicable federal programs pertaining to solid waste management systems.

(8) Establish policies for effective solid waste management systems.

(9) Assist counties and groups of counties to establish and implement solid waste planning and management.

(10) Authorize issuance of such permits and orders and conduct such inspections as may be necessary to implement the provisions of this act and the rules and regulations and standards adopted pursuant to this act.

(11) Conduct and contract for research and investigations in the overall area of solid waste storage, collection, transportation, processing, treatment, recovery and disposal including, but not limited to, new and novel procedures.

(12) Adopt rules and regulations for permitting of all solid waste disposal areas, including those that are privately owned.

(13) Adopt rules and regulations establishing criteria for the location of processing facilities and disposal areas for solid wastes.

(14) Adopt rules and regulations establishing appropriate measures for monitoring solid waste disposal areas and processing facilities, both during operation and after closure.

(15) Adopt rules and regulations requiring that, for such period of time as the secretary shall specify, any assignment, sale, conveyance or transfer of all or any part of the property upon which a permitted disposal area for solid waste is or has been located shall be subject to such terms and conditions as to the use of such property as the secretary shall specify to protect human health and the environment.

(16) Adopt suitable measures, including rules and regulations if appropriate, to encourage recovery and recycling of solid waste for reuse whenever feasible.

(17) Adopt rules and regulations establishing standards for transporters of solid waste.

(18) Adopt rules and regulations establishing minimum standards for closing, termination, and long-term care of sites for the land disposal of solid waste. In this subsection, "site" refers to a site for the land disposal of solid waste which has a permit issued under K.S.A. 65-3407 and amendments thereto. The owner of a site shall be responsible for the long-term care of the site for 30 years after the closing of the site, except the secretary may extend the long-term care responsibility of a particular site or sites as the secretary deems necessary to protect the public health and safety or the environment. Any person acquiring rights of ownership, possession or operation in a permitted site or facility for the land disposal of solid waste at any time after the site has begun to accept waste and prior to closure shall be subject to all requirements of the permit for the site or facility, including the requirements relating to long-term care of the site or facility.

(19) Enter into cooperative agreements with the secretary of commerce for the development and implementation of statewide market development for recyclable materials.

(20) Adopt rules and regulations for the management of nonhazardous special wastes.

(b) In adopting rules and regulations, the secretary shall allow the exemption contained in subsection (f)(1) of 40 CFR 258.1 (October 9, 1991), as amended and in effect on the effective date of this act.

(c) (1) Any rules and regulations adopted by the secretary which establish standards for solid waste processing facilities or solid waste disposal areas that are more stringent than the standards required by federal law or applicable federal regulations on such date shall not become effective until 45 days after the beginning of the next ensuing session of the legislature, which date shall be specifically provided in such rule and regulation.

(2) The provisions of subsection (c)(1) shall not apply to rules and regulations adopted before January 1, 1995, which establish standards for location, design and operation of solid waste processing facilities and disposal areas.

(d) Any solid waste disposal area which qualifies for the exemption provided for by subsection (b) and which successfully demonstrates that naturally occurring geological conditions provide sufficient protection against groundwater contamination shall not be required to construct a landfill liner or leachate collection system. The secretary shall adopt rules and regulations which establish criteria for performing this demonstration and standards for liner and leachate collection systems for exempt landfills which fail the demonstration. Solid waste disposal areas which qualify for the exemption provided for by subsection (b) may be designed with trenches or units which have straight vertical walls. All solid waste disposal areas which qualify for the exemption provided for by subsection (b) shall be required to comply with all applicable rules and regulations adopted by the secretary and approved by the U.S. environmental protection agency, including location restrictions, operating requirements and closure standards for municipal solid waste landfills. Operating requirements include, but are not limited to, hazardous waste screening, daily cover, intermediate cover, disease vector control, gas monitoring and management, air emissions, survey controls, compaction, recordkeeping and groundwater monitoring.

The identification of groundwater contamination caused by disposal activities at a solid waste disposal area which has qualified for the exemption provided for by subsection (b) shall result in:

(1) The loss of such exemption; and

(2) the application of all corrective action and design requirements specified in federal laws and regulations, or in equivalent rules and regulations adopted by the secretary and approved by the U.S. environmental protection agency, to such disposal area. **History:** L. 1970, ch. 264, § 6; L. 1974, ch. 352, § 159; L. 1975, ch. 312, § 12; L. 1977, ch. 221, § 2; L. 1979, ch. 202, §5; L. 1981, ch. 251, § 22; L. 1992, ch. 316, § 4; L. 1993, ch. 274, § 2; L. 1994, ch. 283, § 2; L. 1995, ch. 140, § 1; L. 1997, ch. 139, § 1; July 1.

65-3406a, 65-3406b. History: L. 1979, ch. 202, §§ 2, 3; Repealed, L. 1981, ch. 251, § 28; July 1.

65-3406c. History: L. 1979, ch. 202, § 4; L. 1980, ch. 158, § 3; Repealed, L. 1981, ch. 251, § 28; July 1.

65-3406d. History: L. 1980, ch. 158, § 4, Repealed, L. 1981, ch. 251, § 28; July 1.

65-3407. Permits to construct, alter or operate solid waste processing facilities and solid waste disposal areas; requirements for closure and post-closure care. (a) Except as otherwise provided by K.S.A. 65-3407c, and amendments thereto, no person shall construct, alter or operate a solid waste processing facility or a solid waste disposal area of a solid waste management system, except for clean rubble disposal sites, without first obtaining a permit from the secretary.

(b) Every person desiring to obtain a permit to construct, alter or operate a solid waste processing facility or disposal area shall make application for such a permit on forms provided for such purpose by the rules and regulations of the secretary and shall provide the secretary with such information as necessary to show that the facility or area will comply with the purpose of this act. Upon receipt of any application and payment of the application fee, the secretary, with advice and counsel from the local health authorities and the county commission, shall make an investigation of the proposed solid waste processing facility or disposal area and determine whether it complies with the provisions of this act and any rules and regulations and standards adopted thereunder. The secretary also may consider the need for the facility or area in conjunction with the county or regional solid waste management plan. If the investigation reveals that the facility or area conforms with the provisions of the act and the rules and regulations and standards adopted thereunder, the secretary shall approve the application and shall issue a permit for the operation of each solid waste processing or disposal facility or area set forth in the application. If the facility or area fails to meet the rules and regulations and standards required by this act the secretary shall issue a report to the applicant stating the deficiencies in the application. The secretary may issue temporary permits conditioned upon corrections of construction methods being completed and implemented.

(c) Before reviewing any application for permit, the secretary shall conduct a background investigation of the applicant. The secretary shall consider the financial, technical and management capabilities of the applicant as conditions for issuance of a permit. The secretary may reject the application prior to conducting an investigation into the merits of the application if the secretary finds that:

(1) The applicant currently holds, or in the past has held, a permit under this section and while the applicant held a permit under this section the applicant violated a provision of subsection (a) of K.S.A. 65-3409, and amendments thereto; or

(2) the applicant previously held a permit under this section and that permit was revoked by the secretary; or

(3) the applicant failed or continues to fail to comply with any of the provisions of the air, water or waste statutes, including rules and regulations issued thereunder, relating to environmental protection or to the protection of public health in this or any other state or the federal government of the United States, or any condition of any permit or license issued by the secretary; or if the secretary finds that the applicant has shown a lack of ability or intention to comply with any provision of any law referred to in this subsection or any rule and regulation or order or permit issued pursuant to any such law as indicated by past or continuing violations; or

(4) the applicant is a corporation and any principal, shareholder, or other person capable of exercising total or partial control of such corporation could be determined ineligible to receive a permit pursuant to subsection (c)(1), (2) or (3) above.

(d) Before reviewing any application for a permit, the secretary may request that the attorney general perform a comprehensive criminal background investigation of the applicant; or in the case of a corporate applicant, any principal, shareholder or other person capable of exercising total or partial control of the corporation. The secretary may reject the application prior to conducting an investigation into the merits of the application if the secretary finds that serious criminal violations have been committed by the applicant or a principal of the corporation.

(e) (1) The fees for a solid waste processing or disposal permit shall be established by rules and regulations adopted by the secretary. The fee for the application and original permit shall not exceed \$5,000. Except as provided by paragraph (2), the annual permit renewal fee shall not exceed \$2,000. No refund shall be made in case of revocation. In establishing fees for a construction and demolition landfill, the secretary shall adopt a differential fee schedule based upon the volume of construction and demolition waste to be disposed of at such landfill. All fees shall be deposited in the state treasury and credited to the solid waste management fund. A city, county, other political subdivision or state agency shall be exempt from payment of the fee but shall meet all other provisions of this act.

(2) The annual permit renewal fee for a solid waste disposal area which is permitted by the secretary, owned or operated by the facility generating the waste and used only for industrial waste generated by such facility shall be not less than \$1,000 nor more than \$4,000. In establishing fees for such disposal areas, the secretary shall adopt a differential fee schedule based upon the characteristics of the disposal area sites.

(f) Plans, designs and relevant data for the construction of solid waste processing facilities and disposal sites shall be prepared by a professional engineer licensed to practice in Kansas and shall be submitted to the department for approval prior to the construction, alteration or operation of such facility or area. In adopting rules and regulations, the secretary may specify sites, areas or facilities where the environmental impact is minimal and may waive such preparation requirements provided that a review of such plans is conducted by a professional engineer licensed to practice in Kansas.

(g) Each permit granted by the secretary, as provided in this act, shall be subject to such conditions as the secretary deems necessary to protect human health and the environment and to conserve the sites. Such conditions shall include approval by the secretary of the types and quantities of solid waste allowable for processing or disposal at the permitted location.

(h) Before issuing or renewing a permit to operate a solid waste processing facility or solid waste disposal area, the secretary shall require the permittee to demonstrate that funds are available to ensure payment of the cost of closure and postclosure care and provide liability insurance for accidental occurrences at the permitted facility.

(1) If the permittee owns the land where the solid waste processing facility or disposal area is located or the permit for the facility was issued before the date this act is published in the Kansas register [*Note: April 6, 2006*], the permittee shall satisfy the financial assurance requirement for closure and postclosure care by providing a trust fund, a surety bond guaranteeing payment, an irrevocable letter of credit or insurance policy, or by passing a financial test or obtaining a financial guarantee from a related entity, to guarantee the future availability of funds. The secretary shall prescribe the methods to be used by a permittee to demonstrate sufficient financial strength to become eligible to use a financial test or a financial guarantee procedure in lieu of providing the other financial instruments. Solid waste processing facilities or disposal areas, except municipal solid waste landfills, may also demonstrate financial assurance costs by use of ad valorem taxing power.

(2) If the permittee does not own the land where the solid waste processing facility or disposal area is located and the permit for the facility is issued after the date this act is published in the Kansas register [*Note: April 6, 2006*], the permittee shall satisfy the financial assurance requirement for closure and postclosure care by providing a trust fund, a surety bond guaranteeing payment, or an irrevocable letter of credit.

(3) The secretary shall require each permittee of a solid waste processing facility or disposal area to provide liability insurance coverage during the period that the facility or area is active, and during the term of the facility or area is subject to postclosure care, in such amount as determined by the secretary to insure the financial responsibility of the permittee for accidental occurrences at the site of the facility or area. Any such liability insurance as may be required pursuant to this subsection or pursuant to the rules and regulations of the

secretary shall be issued by an insurance company authorized to do business in Kansas or by a licensed insurance agent operating under authority of K.S.A. 40-246b, and amendments thereto, and shall be subject to the insurer's policy provisions filed with and approved by the commissioner of insurance pursuant to K.S.A. 40-216, and amendments thereto, except as authorized by K.S.A. 40-246b, and amendments thereto. Nothing contained in this subsection shall be deemed to apply to any state agency or department or agency of the federal government.

(i) (1) Permits granted by the secretary as provided by this act shall not be transferable except as follows:

(A) A permit for a solid waste disposal area may be transferred if the area is permitted for only solid waste produced on site from manufacturing and industrial processes or on-site construction or demolition activities and the only change in the permit is a name change resulting from a merger, acquisition, sale, corporate restructuring or other business transaction.

(B) A permit for a solid waste disposal area or a solid waste processing facility may be transferred if the secretary approves of the transfer based upon information submitted to the secretary sufficient to conduct a background investigation of the new owner as specified in subsections (c) and (d) of K.S.A. 65-3407, and amendments thereto, and a financial assurance evaluation as specified in subsection (h) of K.S.A. 65-3407, and amendments thereto. Such information shall be submitted to the secretary not more than one year nor less than 60 days before the transfer. If the secretary does not approve or disapprove the transfer within 30 days after all required information is submitted to the secretary, the transfer shall be deemed to have been approved.

(2) Permits granted by the secretary as provided by this act shall be revocable or subject to suspension whenever the secretary shall determine that the solid waste processing or disposal facility or area is, or has been constructed or operated in violation of this act or the rules and regulations or standards adopted pursuant to the act, or is creating or threatens to create a hazard to persons or property in the area or to the environment, or is creating or threatens to create a public nuisance, or upon the failure to make payment of any fee required under this act.

(3) The secretary also may revoke, suspend or refuse to issue a permit when the secretary determines that past or continuing violations of the provisions of K.S.A. 65-3409, subsection (c)(3) of K.S.A. 65-3407 or K.S.A. 65-3424b, and amendments thereto, have been committed by a permittee, or any principal, shareholder or other person capable of exercising partial or total control over a permittee.

(j) Except as otherwise provided by subsection (i)(1), the secretary may require a new permit application to be submitted for a solid waste processing facility or a solid waste disposal area in response to any change, either directly or indirectly, in ownership or control of the permitted real property or the existing permittee.

(k) In case any permit is denied, suspended or revoked the person, city, county or other political subdivision or state agency may request a hearing before the secretary in accordance with K.S.A. 65-3412, and amendments thereto.

(l) (1) No permit to construct or operate a solid waste disposal area shall be issued on or after the effective date of this act if such area is located within 1/2 mile of a navigable stream used for interstate commerce or within one mile of an intake point for any public surface water supply system.

(2) Any permit, issued before the effective date of this act, to construct or operate a solid waste disposal area is hereby declared void if such area is not yet in operation and is located within 1/2 mile of a navigable stream used for interstate commerce or within one mile of an intake point for any public surface water supply system.

(3) The provisions of this subsection shall not be construed to prohibit: **(A)** Issuance of a permit for lateral expansion onto land contiguous to a permitted solid waste disposal area in operation on the effective date of this act; **(B)** issuance of a permit for a solid waste disposal area for disposal of a solid waste by-product produced on-site; **(C)** renewal of an existing permit for a solid waste area in operation on the effective date of this act; or **(D)** activities which are regulated under K.S.A. 65-163 through 65-165 or 65-171d, and amendments thereto.

(m) Before reviewing any application for a solid waste processing facility or solid waste disposal area, the secretary shall require the following information as part of the application:

(1) Certification by the board of county commissioners or the mayor of a designated city responsible for the development and adoption of the solid waste management plan for the location where the processing facility or disposal area is or will be located that the processing facility or disposal area is consistent with the plan. This

certification shall not apply to a solid waste disposal area for disposal of only solid waste produced on site from manufacturing and industrial processes or from on-site construction or demolition activities.

(2) If the location is zoned, certification by the local planning and zoning authority that the processing facility or disposal area is consistent with local land use restrictions or, if the location is not zoned, certification from the board of county commissioners that the processing facility or disposal area is compatible with surrounding land use.

(3) For a solid waste disposal area permit issued on or after July 1, 1999, proof that the applicant either owns the land where the disposal area will be located or operates the solid waste disposal area for an adjacent or on-site industrial facility, if the disposal area is: (A) A municipal solid waste landfill; or (B) a solid waste disposal area that has: (i) A leachate or gas collection or treatment system; (ii) waste containment systems or appurtenances with planned maintenance schedules; or (iii) an environmental monitoring system with planned maintenance schedules or periodic sampling and analysis requirements. If the applicant does not own the land, the applicant shall also provide proof that the applicant has acquired and duly recorded an easement to the landfill property. The easement shall authorize the applicant to carry out landfill operations, closure, post-closure care, monitoring, and all related construction activities on the landfill property as required by applicable solid waste laws and regulations, as established in permit conditions, or as ordered or directed by the secretary. Such easement shall run with the land if the landfill property is transferred and the easement may only be vacated with the consent of the secretary. These requirements shall not apply to a permit for lateral or vertical expansion contiguous to a permitted solid waste disposal area in operation on July 1, 1999, if such expansion is on land leased by the permittee before April 1, 1999. **History:** L. 1970, ch. 264, § 7; L. 1974, ch. 352, § 160; L. 1977, ch. 221, § 3; L. 1981, ch. 251, § 23; L. 1991, ch. 196, § 1; L. 1992, ch. 316, § 5; L. 1993, ch. 274, § 4; L. 1994, ch. 283, § 3; L. 1997, ch. 140, § 4; L. 1999, ch. 112, § 1; L. 2001, ch. 127, § 2; L. 2002, ch. 101, § 1; L. 2006, ch. 53, § 2; April 6.

65-3407a. Special land use permit for operation of solid waste disposal area void, when. Any special land use permit, issued by a city before the effective date of this act, to use land for the purpose of operating a solid waste disposal area is hereby declared void if such area is not yet in operation and such land is located within 1/2 mile of a navigable stream used for interstate commerce or within one mile of an intake point for any public surface water supply system. **History:** L. 1991, ch. 196, § 2; May 16.

65-3407b. Application of subsection (i)(2) of 65-3407 and 65-3407a. The provisions of subsection (i)(2) of K.S.A. 65-3407 and amendments thereto and K.S.A. 65-3407a shall not apply unless the city or county where the original permitted site was located agrees to reimburse the permittee for all moneys expended to obtain the permits and develop the solid waste disposal area or an amount mutually agreed upon by the parties. **History:** L. 1991, ch. 196, § 3; May 16.

65-3407c. Exemptions from permit requirement. (a) The secretary may authorize persons to carry out the following activities without a solid waste permit issued pursuant to K.S.A. 65-3407, and amendments thereto:

(1) Dispose of solid waste at a site where the waste has been accumulated or illegally dumped. Disposal of some or all such waste must be identified as an integral part of a site cleanup and closure plan submitted to the department by the person responsible for the site. No additional waste may be brought to the site following the department's approval of the site cleanup and closure plan.

(2) Perform temporary projects to remediate soils contaminated by organic constituents capable of being reduced in concentration by biodegradation processes or volatilization, or both. Soil to be treated may be generated on-site or off-site. A project operating plan and a site closure plan must be submitted to the department as part of the project approval process.

(3) Dispose of demolition waste resulting from demolition of an entire building or structure if such waste is disposed of at, adjacent to or near the site where the building or structure was located. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. The disposal area must be covered

with a minimum of two feet of soil and seeded, rocked or paved. The final grades for the disposal site must be compatible with and not detract from the appearance of adjacent properties. In addition to the factors listed in subsection (b), the secretary shall consider the following when evaluating requests for off-site disposal of demolition waste:

(A) Public safety concerns associated with the building or structure proposed to be demolished.

(B) Proposed plans to redevelop the building site which would be impacted by on-site disposal of debris.

(C) The disposal capacity of any nearby permitted landfill.

(4) Dispose of solid waste generated as a result of a transportation accident if such waste is disposed of on property adjacent to or near the accident site. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. A closure plan must be submitted to the department as part of the authorization process.

(5) Dispose of whole unprocessed livestock carcasses on property at, adjacent or near where the animals died if: (A) Such animals died as a result of a natural disaster or their presence has created an emergency situation; and (B) proper procedures are followed to minimize threats to human health and the environment. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site.

(6) Dispose of solid waste resulting from natural disasters, such as storms, tornadoes, floods and fires, or other such emergencies, when a request for disposal is made by the local governmental authority having jurisdiction over the area. Authorization shall be granted by the department only when failure to act quickly could jeopardize human health or the environment. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. The local governmental authority must agree to provide proper closure and postclosure maintenance of the disposal site as a condition of authorization.

(7) Store solid waste resulting from natural disasters, such as storms, tornadoes, floods and fires, or other such emergencies, at temporary waste transfer sites, when a request for storage is made by the local governmental authority having jurisdiction over the area. Authorization shall be granted by the department only when failure to act quickly could jeopardize human health or the environment. Prior to the department's authorization, written approval for the storage must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the storage site. The local governmental authority must agree to provide proper closure of the storage and transfer site as a condition of authorization.

(8) (A) Dispose of solid waste generated by drilling oil and gas wells by land-spreading in accordance with best management practices and maximum loading rates developed by the secretary and published on the department website.

(B) For any area that annually receives more than 25 inches of precipitation, as determined by the department, any solid waste disposed of by land-spreading shall be incorporated into the soil. No land-spreading shall occur on any area where the water table is less than 10 feet or on any area where there is documented groundwater contamination as determined by the department.

(C) (i) Each separate land-spreading location shall require submission of an application to land-spread drilling waste, complete with all information required on the application form developed by the secretary. The contents of the application form shall include, but are not limited to, the land-spreading location, soil characteristics, waste characteristics, waste volumes, drilling mud additives, land-spreading method and post-land-spreading report. A separate land-spreading application and a post-land-spreading report shall be submitted for each location.

(ii) For the purposes of protecting the health, safety and property of the people of the state, and preventing surface and subsurface water pollution and soil pollution detrimental to public health or to the plant, animal and aquatic life of the state, a land-spreading application may not be approved for the same location unless a minimum of three years has passed since the previous land spreading occurred.

(iii) A fee of \$250 shall be paid to the state corporation commission with each drilling waste land-spreading application. The fee shall be remitted to the state treasurer in accordance with K.S.A. 75-4215, and amendments thereto, to be credited to the conservation fee fund.

(D) The secretary and the state corporation commission shall enter into a memorandum of agreement for the purposes of:

- (i) Administering the land-spreading application and approval process;
- (ii) monitoring compliance; and
- (iii) establishing mechanisms for enforcement and remedial actions.

(E) On or before January 1, 2014, the secretary, in coordination with the state corporation commission, shall adopt rules and regulations governing land-spreading of waste generated by drilling oil and gas wells. In developing such rules and regulations, the secretary and the state corporation commission shall seek advice and comments from groundwater management districts and other groups or persons knowledgeable and experienced in areas related to this paragraph.

(F) On or before January 30, 2013 and 2014, the state corporation commission shall present a report to the senate standing committees on natural resources and ways and means and to the house standing committees on agriculture and natural resources and appropriations. Such report shall include, but not be limited to, information concerning the implementation and status of land-spreading procedures and the costs associated with the regulation of land-spreading pursuant to this paragraph.

(G) The provisions of this paragraph shall expire on July 1, 2015.

(b) The secretary shall consider the following factors when determining eligibility for an exemption to the solid waste permitting requirements under this section:

- (1) Potential impacts to human health and the environment.
- (2) Urgency to perform necessary work.
- (3) Costs and impacts of alternative waste handling methods.
- (4) Local land use restrictions.
- (5) Financial resources of responsible parties.
- (6) Technical feasibility of proposed project.
- (7) Technical capabilities of persons performing proposed work.

(c) The secretary may seek counsel from local government officials prior to exempting activities from solid waste permitting requirements under this section. **History:** L. 1997, ch. 140, § 5; L. 1999, ch. 112, § 2; L. 2001, ch. 127, § 3; L. 2011, ch. 18, § 1; L. 2012, ch. 170, § 1; June 7.

65-3408. Compliance with act by state institutions and agencies; permits; contracts. All state institutions and agencies shall obtain a permit from the secretary under the provisions of K.S.A. 65-3407 and shall also comply with all other provisions of this act: *Provided further*, That such institutions and agencies may contract with any person, city, county, other political subdivision or state agency to carry out their responsibilities under the act. **History:** L. 1970, ch. 264, § 8; L. 1974, ch. 352, §161; July 1.

65-3409. Unlawful acts; penalties. (a) It shall be unlawful for any person to:

(1) Dispose of any solid waste by open dumping, but this provision shall not prohibit: (A) The use of solid wastes, except for waste tires, as defined by K.S.A. 65-3424, and amendments thereto, in normal farming operations or in the processing or manufacturing of other products in a manner that will not create a public nuisance or adversely affect the public health; or (B) an individual from dumping or depositing solid wastes resulting from such individual's own residential or agricultural activities onto the surface of land owned or leased by such individual when such wastes do not create a public nuisance or adversely affect the public health or the environment.

(2) Except as otherwise provided by K.S.A. 65-3407c, and amendments thereto, construct, alter or operate a solid waste processing or disposal facility or act as a waste tire transporter or mobile waste tire processor, as defined by K.S.A. 65-3424, and amendments thereto, without a permit or be in violation of the rules and regulations, standards or orders of the secretary.

(3) Violate any condition of any permit issued under K.S.A. 65-3407 or 65-3424b, and amendments thereto.

(4) Conduct any solid waste burning operations in violation of the provisions of the Kansas air quality act.

(5) Store, collect, transport, process, treat or dispose of solid waste contrary to the rules and regulations, standards or orders of the secretary or in such a manner as to create a public nuisance.

(6) Refuse or hinder entry, inspection, sampling and the examination or copying of records related to the purposes of this act by an agent or employee of the secretary after such agent or employee identifies and gives notice of their purpose.

(7) Violate subsection (b) of K.S.A. 65-3424a, subsection (c) of K.S.A. 65-3424b or K.S.A. 65-3424i, and amendments thereto.

(8) Divide a solid waste disposal area which has been issued a permit pursuant to K.S.A. 65-3407, and amendments thereto, into two or more parcels of real property for the purpose of selling or transferring a portion of the permitted area to a new owner without receiving prior approval of the secretary. If the secretary does not approve or deny the division of the area within 60 days after the matter is submitted to the secretary for approval, the division shall be deemed to have been approved. Approval pursuant to this subsection shall not be necessary for transfer of a permitted solid waste disposal area as allowed by subsection (i)(1) of K.S.A. 65-3407, and amendments thereto.

(b) No person shall be held responsible for failure to secure a permit under the provisions of this section for the dumping or depositing of any solid waste on land owned or leased by such person without such person's expressed or implied consent, permission or knowledge.

(c) Any person who violates any provision of subsection (a) shall be guilty of a class A misdemeanor and, upon conviction thereof, shall be punished as provided by law. **History:** L. 1970, ch. 264, § 9; L. 1974, ch. 352, § 162; L. 1977, ch. 221, § 4; L. 1981, ch. 251, § 24; L. 1991, ch. 197, § 8; L. 1993, ch. 13, § 17; L. 1997, ch. 140, § 6; L. 2001, ch. 127, § 4; July 1.

65-3410. Cities or counties authorized to provide for collection and disposal of solid wastes or contract therefor; fees; adoption of regulations and standards. (a) Each city or county or combination of such cities and counties may provide for the storage, collection, transportation, processing and disposal of solid wastes and recyclables generated within its boundaries; and shall have the power to implement any approved solid waste management plan and to purchase all necessary equipment, acquire all necessary land, build any necessary buildings, incinerators, transfer stations, or other structures, lease or otherwise acquire the right to use land or equipment and to do all other things necessary for a proper effective solid waste management system and recycling program including the levying of fees and charges upon persons receiving service. On or before the first day of July of each calendar year, the board of county commissioners of any county, may, by resolution establish a schedule of fees to be imposed on real property within any county solid waste and recyclables service area, revenue from such fees to be used: To implement an approved solid waste management plan, to conduct operations necessary to administer the plan and to carry out its purposes and provisions; or for the acquisition, operation and maintenance of county waste disposal sites; or for financing waste collection, storage, processing, reclamation, disposal services and recycling programs, where such services are provided. In establishing the schedule of fees, the board of county commissioners shall classify the real property within the county solid waste and recyclables service area based upon the various uses to which the real property is put, the volume of waste occurring from the different land uses and any other factors that the board determines would reasonably relate the waste disposal and recyclable fee to the real property upon which it would be imposed.

The board shall set a reasonable fee for each category established and divide the real property within the county service areas according to categories and ownership. The board shall impose the appropriate fee upon each division of land and provide for the billing and collection of such fees. The fees may be established, billed, and collected on a monthly, quarterly or yearly basis. Fees collected on a yearly basis may be billed on the ad valorem tax statement. Prior to the collection of any fees levied on real property by the board under this section, the board shall notify affected property owners by causing a copy of the schedule of fees to be mailed to each property owner to whom tax statements are mailed in accordance with K.S.A. 79-2001, and amendments thereto.

Any fees authorized pursuant to this section which remain unpaid for a period of 60 or more days after the date upon which they were billed may be collected thereafter by the county as provided herein.

(1) At least once a year the board of county commissioners shall cause to be prepared a report of delinquent fees. The board shall fix a time, date, and place for hearing the report and any objections or protests thereto.

(2) The board shall cause notice of the hearing to be mailed to the property owners listed on the report not less than 10 days prior to the date of the hearing.

(3) At the hearing the board shall hear any objections or protests of property owners liable to be assessed for delinquent fees. The board may make such revisions or corrections to the report as it deems just, after which, by resolution, the report shall be confirmed.

(4) The delinquent fees set forth in the report as confirmed shall constitute assessments against the respective parcels of land and are a lien on the property for the amount of such delinquent fees. A certified copy of the confirmed report shall be filed with the county clerk for the amounts of the respective assessments against the respective parcels of land as they appear on the current assessment roll. The lien created attaches upon recordation, in the office of the county clerk of the county in which the property is situated, of a certified copy of the resolution of confirmation. The assessment may be collected at the same time and in the same manner as ordinary county ad valorem property taxes are collected and shall be subject to the same penalties and the same procedure and sale in case of delinquency as provided for such taxes. All laws applicable to the levy, collection, and enforcement of county ad valorem property taxes shall be applicable to such assessment.

Any city collecting solid waste fees or charges may collect delinquent fees or charges for garbage and trash storage, collection and disposal in the manner provided for counties.

(b) In carrying out its responsibilities, any such city or county may adopt ordinances, resolutions, regulations and standards to implement an approved solid waste management plan, to conduct operations necessary to administer the plan and to carry out its purposes and provisions; and for the storage, collection, transportation, processing and disposal of solid wastes and recyclables which shall be in conformity with the rules, regulations, standards and procedures adopted by the secretary for the storage, collection, transportation, processing and disposal of solid wastes and recyclables.

(c) Cities or counties may contract with any person, city, county, other political subdivision or state agency in this or other states to carry out their responsibilities to implement an approved solid waste management plan including any operations necessary to administer the plan and carry out its purposes and provisions; and for the collection, transportation, processing and disposal of solid wastes and recyclables. **History:** L. 1970, ch. 264, § 10; L. 1972, ch. 239, § 1; L. 1974, ch. 257, § 1; L. 1974, ch. 352, § 163; L. 2004, ch. 163, § 4; L. 2009, ch. 117, § 1; July 1.

65-3410a. Cities; counties; solid waste plan restrictions.

(a) Except as provided by subsection (b), no city or county shall adopt by ordinance, resolution or in a solid waste management plan under K.S.A. 65-3405 or 65-3410, and amendments thereto, restrictions for any solid waste disposal area within its boundaries if such restrictions supersede or impair the local legislation of another city or county being serviced by the same solid waste disposal area or require another city or county to adopt new solid waste management requirements not currently required by statewide rules and regulations.

(b) A city or county may adopt restrictions for a solid waste disposal area under subsection (a) if:

(1) The city or county owns the solid waste disposal area; and

(2) such restrictions apply to the residents of such city or county but not to residents of another city or county being serviced by the same solid waste disposal area.

(c) This section shall be part of and supplemental to the provisions of article 34 of chapter 65 of the Kansas Statutes Annotated, and amendments thereto.

(d) This section shall apply to any solid waste disposal area, including those in operation prior to July 1, 2014. **History:** L. 2013, ch. 129, § 1; L. 2014, H.B. 2551; July 1.

65-3410b. Solid waste report: secretary of health and environment; certain legislative committees.

(a) On or before January 1, 2014, the secretary of health and environment shall prepare, with review and input from operators of municipal solid waste landfills, haulers of solid waste, business and residential consumers of haulers of solid waste, cities and counties, a report on solid waste management in Kansas for the senate committee on ethics, elections and local government and the house committee on local government. The report shall include, but not be limited to, the following:

(1) A review of statutes, rules and regulations and policies on solid waste management, including, but not

limited to, details on yard waste, recycling, generation rates, composting, precipitation, source reduction efforts, population, landfill capacity and gas recovery in landfills; and

(2) recommendations for legislative changes and estimates of the cost of the state of implementing such changes.

(b) This section shall be part of and supplemental to the provisions of article 34 of chapter 65 of the Kansas Statutes Annotated, and amendments thereto. **History:** L. 2013, ch. 129, § 2; July 1.

65-3411. Orders to prevent pollution or hazard. If the secretary finds that the generation, accumulation, management or discharge of solid waste by any person is, or threatens to cause pollution of the land, air or waters of the state, or is a hazard to property in the area or to public health and safety, the secretary may order the person to alter the generation, accumulation or management of the solid waste or to provide and implement such solid waste management system as will prevent or remove pollution or hazards. The secretary may order any person having a permit issued pursuant to this act and operating a public or commercial solid waste management system, or any part thereof, which the secretary finds suitable to manage the solid waste, to provide and implement a solid waste management system or part thereof to prevent or remove such pollution or hazard. Such order shall specify a fair compensation to the owner or permittee for property taken or used and shall specify the terms and conditions under which the permittee shall provide such solid waste management services. Such order shall specify the length of time, after receipt of the order during which the person or permittee shall provide or implement the solid waste management system or alter the generation accumulation or management of the solid waste. **History:** L. 1970, ch. 264, § 11; L. 1974, ch. 352, § 164; L. 1977, ch. 221, § 5; L. 1981, ch. 251, § 25; L. 1986, ch. 318, § 97; July 1.

65-3412. Hearings in accordance with Kansas administrative procedure act; judicial review. Any person aggrieved by an order or disapproval of the secretary pursuant to K.S.A. 65-3411, and amendments thereto, may, within 15 days of service of the order, request in writing a hearing on the order. Hearings shall be conducted in accordance with the provisions of the Kansas administrative procedure act. Any action of the secretary pursuant to this section is subject to review in accordance with the Kansas judicial review act. **History:** L. 1970, ch. 264, § 12; L. 1974, ch. 352, § 165; L. 1986, ch. 318, § 98; L. 1988, ch. 356, § 203; L. 2010, ch. 17, § 144; July 1.

65-3413. Designation of local agency to act as agent of secretary. The secretary may designate county, city-county and multicounty health departments to act as his or her agent in carrying out the provisions of this act under such terms and conditions as he or she shall prescribe. **History:** L. 1970, ch. 264, § 13; L. 1974, ch. 352, § 166; L. 1980, ch. 182, § 28; July 1.

65-3414. Enforcement by county attorney. The county or district attorney of every county is hereby authorized and directed to file appropriate actions for enforcement of this act. The county or district attorney filing the action shall notify the secretary before filing the action. **History:** L. 1970, ch. 264, § 14; L. 1974, ch. 352, § 167; L. 1997, ch. 140, § 7; July 1.

65-3415. Solid waste grants. (a) The secretary is authorized to assist counties, designated cities or regional solid waste management entities by administering grants to pay up to 60% of the costs of preparing and revising official plans for solid waste management systems in accordance with the requirements of this act and the rules and regulations and standards adopted pursuant to this act, and for carrying out related studies, surveys, investigations, inquiries, research and analyses.

(b) The secretary is authorized to assist counties, designated cities, municipalities, regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, colleges, universities, schools, state agencies or private entities, by administering competitive grants that pay up to 75% of eligible costs incurred by such a county, city, regional entity, college, university, school, state agency or private entity pursuant to an approved solid waste management plan, for any project related to the development and operation of recycling, source reduction,

waste minimization and solid waste management public education programs. Such projects shall include, but not be limited to, the implementation of innovative waste processing technologies which demonstrate nontraditional methods to reduce waste volume by recovering materials or by converting the waste into usable by-products or energy through chemical or physical processes. To be eligible for competitive grants awarded pursuant to this section, a county, designated city, regional entity, college, university, school, state agency or private entity must be implementing a project which is part of a solid waste management plan approved by the secretary or implementing a project with statewide significance as determined by the secretary with the advice and counsel of the solid waste grants advisory committee.

(c) The secretary is authorized to assist counties, cities or regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, by administering grants that pay up to 60% of costs incurred by such a county, city or regional entity for:

- (1) The development or enhancement of temporary and permanent household hazardous waste programs operated in accordance with K.S.A. 65-3460 and amendments thereto;
- (2) the first year of operation following initial start-up of temporary and permanent household hazardous waste programs; and
- (3) educating the public regarding changes in household hazardous waste collection program operations or services.

(d) The secretary is authorized to assist counties, cities or regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, by administering grants that pay up to 75% of costs incurred by such a county, city or regional entity to develop and implement temporary agricultural pesticide collection programs.

(e) The secretary is authorized to assist counties, cities or regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, by administering grants that pay up to 75% of costs incurred by such a county, city, or regional entity to develop and implement exempt small quantity hazardous waste generator waste collection programs, subject to the following:

- (1) The aggregate amount of all such grants made for a fiscal year shall not exceed \$150,000; and
- (2) no grantee shall receive any such grants in an aggregate amount exceeding \$50,000.

(f) (1) Failure of any public or private entity to pay solid waste tonnage fees as required pursuant to K.S.A. 65-3415b, and amendments thereto, shall bar receipt of any grant funds by such entity until fees and related penalties have been paid.

(2) Failure of a county or regional authority to perform annual solid waste plan reviews and five year public hearings, and submit appropriate notification to the secretary that such actions have been carried out pursuant to K.S.A. 65-3405, and amendments thereto, shall bar receipt of any grant funds by any entity within the jurisdiction of such county or regional authority unless the grant would support a project expected to yield benefits to counties outside the jurisdiction of such county or regional authority.

(3) A city, county, regional authority, college, university, school, state agency or private entity shall not be eligible to receive grants authorized in K.S.A. 65-3415, and amendments thereto, if the department determines that such city, county, regional authority, college, university, school, state agency or private entity is operating in substantial violation of applicable solid and hazardous waste laws or rules and regulations.

(4) The secretary may establish additional minimum requirements for grant eligibility.

(g) If the secretary determines that a grant recipient has utilized grant moneys for purposes not authorized in the grant contract, the secretary may order the repayment of such moneys and cancel any remaining department commitments under the grant. If the grant recipient fails to comply with the secretary's order, the secretary may initiate a civil action in district court to recover any unapproved expenditures, including administrative and legal expenses incurred to pursue such action. Recovered grant moneys or expenses shall be remitted to the state treasurer, who shall deposit the entire amount in the state treasury and credit it to the solid waste management fund.

(h) All grants shall be made in accordance with appropriation acts from moneys in the solid waste management fund created by K.S.A. 65-3415a and amendments thereto.

(i) Local match requirements for all solid waste grant programs may be met by in-kind contributions.

History: L. 1970, ch. 264, § 15; L. 1974, ch. 352, § 168; L. 1992, ch. 316, § 6; L. 1995, ch. 221, § 2; L. 1997, ch. 140, § 8; L. 2000, ch. 96, § 1; L. 2001, ch. 127, § 5; July 1.

65-3415a. Solid waste management fund. (a) There is hereby created in the state treasury the solid waste management fund.

(b) The secretary shall remit to the state treasurer, in accordance with the provisions of K.S.A. 75-4215, and amendments thereto, all moneys collected or received by the secretary from the following sources:

- (1) Solid waste tonnage fees imposed pursuant to K.S.A. 65-3415b, and amendments thereto;
- (2) application and annual fees provided for by K.S.A. 65-3407, and amendments thereto;
- (3) gifts, grants, reimbursements or appropriations intended to be used for the purposes of the fund, but excluding federal grants and cooperative agreements; and
- (4) any other moneys provided by law.

Upon receipt of each such remittance, the state treasurer shall deposit in the state treasury any amount remitted pursuant to this subsection to the credit of the solid waste management fund.

(c) Moneys in the solid waste management fund shall be expended for the following purposes:

- (1) Grants to counties or groups of counties or designated city or cities pursuant to K.S.A. 65-3415, and amendments thereto;
- (2) monitoring and investigating solid waste management plans of counties and groups of counties;
- (3) payment of extraordinary costs related to monitoring permitted solid waste processing facilities and disposal areas, both during operation and after closure;
- (4) payment of costs of postclosure cleanup of permitted solid waste disposal areas which, as a result of a postclosure occurrence, pose a substantial hazard to public health or safety or to the environment;
- (5) emergency payment for costs of cleanup of solid waste disposal areas which were closed before the effective date of this act and which pose a substantial risk to the public health or safety or to the environment, but the total amount of such emergency payments during a fiscal year shall not exceed an amount equal to 50% of all amounts credited to the fund during the preceding fiscal year;
- (6) payment for emergency action by the secretary as necessary or appropriate to assure that the public health or safety is not threatened whenever there is a release from a solid waste processing facility or a solid waste disposal area;
- (7) payment for corrective action by the secretary at an active or closed solid waste processing facility or a solid waste disposal area where solid waste management activity has resulted in an actual or potential threat to human health or the environment, if the owner or operator has not been identified or is unable or unwilling to perform corrective action;
- (8) payment of the administrative, technical and legal costs incurred by the secretary in carrying out the provisions of K.S.A. 65-3401 through 65-3423, and amendments thereto, including the cost of any additional employees or increased general operating costs of the department attributable therefor;
- (9) development of educational materials and programs for informing the public about solid waste issues;
- (10) direct payments to reimburse counties or cities for household, farmer or exempt small quantity generator hazardous wastes generated from persons not served by existing household hazardous waste programs or direct payment of contractors for the disposal costs of such wastes;
- (11) payment of costs associated with the solid waste grants advisory board pursuant to K.S.A. 65-3426, and amendments thereto;
- (12) with the consent of the city or county, payment for the removal and disposal or on-site stabilization of solid waste which has been illegally dumped when the responsible party is unknown, unwilling or unable to perform the necessary corrective action, provided that: (A) Moneys in the fund shall be used to pay only 75% of the costs of such corrective action and the city or county shall pay the remaining 25% of such costs; and (B) not more than \$10,000 per site shall be expended from the fund for such corrective action;
- (13) payment of the costs to administer regional or statewide waste collection programs designed to remove hazardous materials and wastes from homes, farms, ranches, institutions and small businesses not generally covered by state or federal hazardous waste laws and rules and regulations; and

(14) payment for the disposal of household hazardous waste generated as a result of community clean-up activities following natural disasters such as floods and tornados.

(d) If the secretary determines that expenditures from the solid waste management fund are necessary to perform authorized corrective actions related to solid waste management activities, the person or persons responsible for illegal dumping activity or the operation or long-term care of a disposal area whose failure to comply with this act, rules and regulations promulgated thereunder, or permit conditions resulted in such determination, shall be responsible for the repayment of those amounts expended. The secretary shall take appropriate action to enforce this provision against any responsible person. If amounts are recovered for payment for corrective action pursuant to subsection (c)(12), 25% of the amount recovered shall be paid to the city or county that shared in the cost of the corrective action. Otherwise, the secretary shall remit any amounts recovered and collected in such action to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the solid waste management fund. Prior to initiating any corrective action activities authorized by this section, the secretary shall give written notice to the person or persons responsible for the waste to be cleaned up and to the property owner that the department will undertake corrective action if the responsible person or persons do not perform the necessary work within a specified time period. The department and its representatives are authorized to enter private property to perform corrective actions if the responsible party fails to perform required clean-up work but no such entry shall be made without the property owner's consent except upon notice and hearing in accordance with the Kansas administrative procedure act and a finding that the solid waste creates a public nuisance or adversely affects the public health or the environment.

(e) Expenditures from the solid waste management fund shall be made in accordance with appropriations acts upon warrants of the director of accounts and reports issued pursuant to vouchers approved by the secretary or a person designated by the secretary.

(f) On or before the 10th of each month, the director of accounts and reports shall transfer from the state general fund to the solid waste management fund interest earnings based on:

- (1) The average daily balance of moneys in the solid waste management fund for the preceding month; and
- (2) the net earnings rate of the pooled money investment portfolio for the preceding month.

(g) The solid waste management fund shall be used for the purposes set forth in this act and for no other governmental purposes. It is the intent of the legislature that the fund shall remain intact and inviolate for the purposes set forth in this act, and moneys in the fund shall not be subject to the provisions of K.S.A. 75-3722, 75-3725a and 75-3726a, and amendments thereto.

(h) The secretary shall prepare and deliver to the legislature on or before the first day of each regular legislative session, a report which summarizes all expenditures from the solid waste management fund, fund revenues and recommendations regarding the adequacy of the fund to support necessary solid waste management programs. **History:** L. 1992, ch. 316, § 8; L. 1993, ch. 207, § 11; L. 1995, ch. 221, § 3; L. 1996, ch. 253, § 15; L. 1997, ch. 140, § 9; L. 2000, ch. 96, § 2; L. 2001, ch. 5, § 243; July 1.

65-3415b. Solid waste tonnage fees. (a) There is hereby imposed a state solid waste tonnage fee of \$1.00 for each ton or equivalent volume of solid waste disposed of at any solid waste disposal area in this state other than solid waste enumerated in subsection (c) or solid waste disposal authorized by the secretary pursuant to subsection (a) of K.S.A. 65-3407c, and amendments thereto.

(b) There is hereby imposed a state solid waste tonnage fee of \$1.00 for each ton or equivalent volume of solid waste transferred out of Kansas through a transfer station, other than waste enumerated in subsection (c).

(c) The fees imposed by this section shall not apply to:

- (1) Any waste tire, as defined by K.S.A. 65-3424, and amendments thereto, disposed in or at a permitted solid waste disposal area;
- (2) sludges from public drinking water supply treatment plants, when disposed of at a monofill permitted by the secretary;
- (3) clean rubble;

(4) solid waste solely consisting of vegetation from land clearing and grubbing, utility maintenance and seasonal or storm-related cleanup but such exception shall not apply to yard waste;

(5) construction and demolition waste disposed of by the federal government, by the state of Kansas, or by any city, county or other unit of local government in the state of Kansas, or by any person on behalf thereof; and

(6) industrial waste disposed of at a solid waste disposal area which is permitted by the secretary, and is owned or operated by or for the industrial facility generating the waste and which is used only for industrial waste generated by such industrial facility.

(d) The operator of a solid waste disposal area or transfer station shall pay the fee imposed by this section.

(e) The secretary of health and environment shall administer, enforce and collect the fee imposed by this section. The secretary shall have the authority to waive such fee when large quantities of waste are generated due to major natural disasters such as floods, tornados and fires unless persons paying such fees are able to recover such fees from the federal government. Except as otherwise provided by subsections (a) and (b), all laws and rules and regulations of the secretary of revenue relating to the administration, enforcement and collection of the retailers' sales tax shall apply to such fee insofar as they can be made applicable. The secretary of health and environment shall adopt any other rules and regulations as necessary for the efficient and effective administration, enforcement and collection thereof.

(f) The secretary of health and environment shall remit all moneys collected from fees imposed pursuant to subsections (a) and (b) to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the solid waste management fund created by K.S.A. 65-3415a, and amendments thereto. **History:** L. 1992, ch. 316, § 9; L. 1993, ch. 274, § 3; L. 1995, ch. 221, § 5; L. 1997, ch. 140, § 10; L. 2000, ch. 96, § 3; L. 2001, ch. 5, § 244; L. 2002, ch. 101, § 2; L. 2006, ch. 53, § 3; April 6.

65-3415c. History: L. 1992, ch. 316, § 10; L. 1997, ch. 140, § 15; July 1.

65-3415d. History: L. 1992, ch. 316, § 11; Repealed, L. 1993, ch. 274, § 7; May 6.

65-3415e. Fees on disposal at private disposal areas. (a) Except as provided by subsection (b), any county or group of counties operating a solid waste disposal area shall levy a charge on any solid waste, whether generated within or outside such county or counties, that is deposited at any privately owned solid waste disposal area located in such county or counties. The revenue from such charge may be used by the county or group of counties for the development and implementation of its solid waste management plan and the costs of closure and postclosure cleanup of solid waste disposal areas within the county or group of counties.

(b) The board of county commissioners of any county by unanimous vote may determine not to impose the fee provided for by subsection (a).

(c) Any charges imposed by counties under this section shall be in addition to any other fees, charges, franchise payments or taxes imposed for solid waste deposited at a solid waste disposal area. The secretary of health and environment shall make available to counties information as to the amounts paid by the operators of solid waste disposal areas under the provisions of K.S.A. 65-3415b and amendments thereto. **History:** L. 1992, ch. 316, § 12; L. 1997, ch. 140, § 11; July 1.

65-3415f. Solid waste tonnage fees authorized to be imposed by counties; exceptions; collection and disposition of proceeds. (a) As used in this section, terms have the meanings provided by K.S.A. 65-3402 and amendments thereto.

(b) In addition to any other fee provided by law, the board of county commissioners of any county may impose, by resolution adopted pursuant to this section, a solid waste tonnage fee for each ton or equivalent volume of solid waste disposed of at any solid waste disposal area operated by such county. Such fees shall not apply to any solid waste exempted from the state solid waste tonnage fee imposed by K.S.A. 65-3415b, and amendments thereto.

(c) Fees imposed pursuant to this section shall be collected by the county and deposited in a special fund in the county treasury. All interest earned on moneys in the fund shall also be deposited in the fund. If there is more than one solid waste disposal area in the county where fees are imposed pursuant to this section, a separate fund for each such disposal area shall be maintained from the fees collected from such disposal area. Money in the fund shall be used only for payment of costs of closure, postclosure actions and contamination remediation associated with the solid waste disposal area until the secretary determines that all requirements for closure, postclosure actions and contamination remediation associated with the disposal area have been met.

(d) The board of county commissioners, by resolution, may modify, discontinue or reinstate the fee authorized by this section.

(e) Transfer or expenditure of moneys in a special fund provided for by this section for any purpose other than authorized by this section is a class A nonperson misdemeanor and constitutes grounds for forfeiture of public office.

(f) If two or more counties jointly operate a solid waste disposal area, the fee provided for by this section on solid waste disposed of at such disposal area may be imposed, modified, discontinued or reinstated only if a majority of the board of county commissioners of each county jointly operating the disposal area votes to impose, modify, discontinue or reinstate the fee. **History:** L. 1994, ch. 283, § 4; L. 1997, ch. 140, § 12; L. 2002, ch. 101, § 3; May 23.

65-3416. Severability. The provisions of this act are severable and if any provision or part thereof shall be held invalid or unconstitutional or inapplicable to any person or circumstances, such invalidity, unconstitutionality or inapplicability shall not affect or impair the remaining provisions of the act. **History:** L. 1970, ch. 264, § 16; July 1.

65-3416a. Severability. If any clause, sentence, section, provision, or part of this act shall be adjudged to be unconstitutional or invalid for any reason by any court of competent jurisdiction, such judgment shall not invalidate, impair, or affect the remainder of this act, which shall remain in full force and effect. **History:** L. 1977, ch. 221, § 8; April 9.

65-3416b. Severability. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected. **History:** L. 1992, ch. 316, § 14; July 1.

65-3417. Solid waste plans and programs; considerations; judicial review of secretary's actions. (a) In developing solid waste plans or the implementation of a solid waste program in conformance with K.S.A. 65-3401 through 65-3415, and amendments thereto, and rules and regulations adopted thereunder, cities, counties or multiples or combinations thereof shall consider demographic and geographic differences within their area of jurisdiction in promulgating solid waste plans and programs, and the board shall consider the demographic and geographic variations in giving approval or denying approval of such plans and programs.

(b) Any action of the secretary pursuant to the provisions of article 34 of chapter 65 of the Kansas Statutes Annotated, and amendments thereto, is subject to review in accordance with the Kansas judicial review act. **History:** L. 1973, ch. 257, § 1; L. 1975, ch. 462, § 104; L. 1986, ch. 318, § 99; L. 2010, ch. 17, § 145; July 1.

65-3418. Vesting of title to solid waste; liability of generator; authority of resource recovery facilities provided by cities or counties or combinations thereof; contracts. (a) Title to the solid waste collected, processed or disposed of in accordance with the provisions of this act and the rules and regulations adopted thereunder shall vest in the owner of the solid waste management activity, area or facility in which the solid waste is placed. Solid waste produced from a discrete source disposed of in ways other than in accordance with this act shall remain the property of the generator and the generator shall be liable for removal of the waste, restoration of the area in which the waste was disposed and to provide for lawful disposal of the waste. It shall not constitute a defense to the generator that the generator acted through an independent contractor in the transportation or disposal of the solid waste.

(b) When a city or a county or any combination of cities or counties, or both, provides by contract for a resource recovery facility or facilities to recover materials or energy from solid wastes as a part of an approved solid waste management plan, the resource recovery facility or facilities shall have sole ownership, utilization and disbursement control of all waste collected by that facility or facilities or delivered to that facility or facilities and shall have the power to sell recovered or recycled materials or energy. Such provision shall be interpreted to include either active participation and financial support of such resource recovery facility or facilities or oversight and regulatory control of such facility or facilities by the local governments. A resource recovery facility may contract to dispose of materials or products as allowed by rules and regulations of the secretary adopted pursuant to K.S.A. 65-3401 *et seq.*, and amendments thereto and conditions as set by the original owner of such materials delivered for disposal and resource recovery, so as to avoid reuse or resale of such special products or materials. Nothing herein shall be construed to prohibit or limit private waste collectors from extracting from the waste they collect, prior to delivery to the resource recovery facility, any materials that may have value to such collectors for purposes of recycling, reuse or resale. **History:** L. 1977, ch. 221, § 6; L. 1981, ch. 251, § 26; L. 1984, ch. 239, § 1; July 1.

65-3419. Violations of act; penalties; procedure; injunctions. (a) Any person who violates any provision of subsection (a) of K.S.A. 65-3409, and amendments thereto, shall incur, in addition to any other penalty provided by law, a civil penalty in an amount of up to \$5,000 for every such violation and, in the case of a continuing violation, every day such violation continues shall be deemed a separate violation.

(b) The director of the division of environment, upon a finding that a person has violated any provision of subsection (a) of K.S.A. 65-3409, and amendments thereto, may impose a penalty within the limits provided in this section, which penalty shall constitute an actual and substantial economic deterrent to the violation for which it is assessed.

(c) No penalty shall be imposed pursuant to this section except upon the written order of the director of the division of environment to the person who committed the violation. Such order shall state the violation, the penalty to be imposed and the right of such person to appeal to a hearing before the secretary of health and environment. Any such person may, within 15 days after service of the order, make written request to the secretary for a hearing thereon. Hearings under this subsection shall be conducted in accordance with the provisions of the Kansas administrative procedure act.

(d) Any action of the secretary pursuant to subsection (c) is subject to review in accordance with the Kansas judicial review act.

(e) Notwithstanding any other provision of this act, the secretary, upon receipt of information that the storage, transportation, processing, treatment or disposal of any waste may present a substantial hazard to the health of persons or to the environment or for a threatened or actual violation of this act or rules and regulations adopted pursuant thereto, or any orders issued pursuant thereto, or any permit conditions required thereby, may take such action as the secretary determines to be necessary to protect the health of such persons or the environment. The action the secretary may take shall include, but not be limited to:

(1) Issuing an order directing the owner, generator, transporter or the operator of the processing, treatment or disposal facility or site, or the custodian of the waste, which constitutes such hazard or threatened or actual violation, to take such steps as are necessary to prevent the act or eliminate the practice which constitutes such hazard. Such action may include, with respect to a facility or site, permanent or temporary cessation of operation.

(2) Commencing an action to enjoin acts or practices specified in paragraph (1) or requesting that the attorney general or appropriate district or county attorney commence an action to enjoin those acts or practices or threatened acts or practices. Upon a showing by the secretary that a person has engaged in those acts or practices or intends to engage in those acts or practices, a permanent or temporary injunction, restraining order or other order may be granted by any court of competent jurisdiction. An action for injunction under this paragraph (2) shall have precedence over other cases in respect to order of trial.

(3) Applying to the district court in the county in which an order of the secretary under paragraph (1) will take effect, in whole or in part, for an order of that court directing compliance with the order of the secretary.

Failure to obey the court order shall be punishable as contempt of the court issuing the order. The application under this paragraph (3) for a court order shall have precedence over other cases in respect to order of trial.

(f) In any civil action brought pursuant to this section in which a temporary restraining order, preliminary injunction or permanent injunction is sought, it shall not be necessary to allege or prove at any stage of the proceeding that irreparable damage will occur should the temporary restraining order, preliminary injunction or permanent injunction not be issued or that the remedy at law is inadequate, and the temporary restraining order, preliminary injunction or permanent injunction shall issue without such allegations and without such proof.

History: L. 1977, ch. 221, § 7; L. 1986, ch. 318, § 100; L. 1988, ch. 356, § 204; L. 1989, ch. 186, § 31; L. 1992, ch. 316, § 7; L. 2010, ch. 17, § 146; July 1.

65-3420. History: L. 1979, ch. 202, § 6; Repealed, L. 1981, ch. 251, § 28; July 1.

65-3421. Resource recovery facilities provided by cities or counties; contracts. When a city or a county or combination of cities or counties provides for a facility or facilities to recover materials or energy as a part of an approved solid waste management plan, any city, county or state agency may enter into a long-term contract to supply solid waste to the resource recovery facility or facilities; to construct, operate and maintain or construct or operate or maintain such facilities; to contract with a private entity for the construction, operation and maintenance of such facilities; to market materials or energy recovered from such facility or facilities; or to utilize such facility or facilities to conserve materials or energy by reducing the volume of solid waste. For the purpose of this section "long-term" shall mean a period of not less than 10 nor more than 30 years. All long-term contracts negotiated under this section shall be reviewed and approved by the attorney general before becoming effective. **History:** L. 1981, ch. 251, § 27; L. 1984, ch. 239, § 2; July 1.

65-3422. History: L. 1984, ch. 239, § 3; Repealed, L. 1997, ch. 140, § 15; July 1.

65-3423. Same; contracts with private persons for performance of certain functions; authority of private entities. (a) When a city or a county or any combination of cities or counties, or both, provides for a facility or facilities to recover materials or energy as a part of an approved solid waste management plan, the city or county or the separate legal entity created to govern the combination of cities or counties, or both, if such an entity exists, may enter into contracts with private persons for the performance of any such functions of the plan which, in the opinion of the city or county or such separate legal entity, can desirably and conveniently be carried out by a private person under contract provided any such contract shall contain such terms and conditions as will enable the city or county or such separate legal entity to retain overall supervision and control of the business, design, operating management, transportation, marketing, planning and research and development functions to be carried out or to be performed by such private persons pursuant to such contract. Such contracts may be entered into either on a negotiated or an open-bid basis, and the city or county or such separate legal entity in its discretion may select the type of contract it deems most prudent to utilize considering the scope of work, the management complexities associated therewith, the extent of current and future technological development requirements and the best interests of the state.

(b) Private entities may construct, operate, maintain and own resource recovery facilities; form contracts to supply solid waste to the resource recovery facility or facilities; form contracts to market materials or energy recovered from such facility or facilities; or utilize such facility or facilities to conserve materials or energy by reducing the volume of solid waste under the supervision of and with the approval of the city or county or such separate legal entity, subject to the approval of the Kansas department of health and environment, and in accordance with the approved local solid waste management plan. **History:** L. 1984, ch. 239, § 4; July 1.

65-3424. Definitions. As used in K.S.A. 65-3424 through 65-3424i, and amendments thereto, unless the context otherwise requires:

(a) Terms have the meaning provided by K.S.A. 65-3402, and amendments thereto.

(b) "**Abatement**" means the processing or removing to an approved storage site of waste tires which are creating a danger or nuisance.

(c) **"Beneficial use"** means the use or storage of waste tires in a way that:

(1) Creates an on-site economic benefit to the owner of the tires, including, but not limited to, bumpers for boat docks or boats, playground equipment, silo covers, traffic control, feed bunks, water tanks, windbreaks constructed of baled tires or in a manner consistent with rules and regulations of the secretary, erosion control on the face of an earthen dam and stabilization of soil or sand blow-outs caused by wind; and

(2) as determined by the secretary, causes no adverse impacts to human health or the environment and complies with all applicable zoning requirements.

(d) **"Contaminated waste tire"** means a tire which, as determined in accordance with rules and regulations adopted by the secretary, is recovered in a project to abate a waste tire accumulation and is so coated by or filled with dirt, mud, sludge or other natural substances as to render the tire substantially unsuitable for processing.

(e) **"Illegal waste tire accumulation"** means any waste tire pile containing more than 50 waste tires except the following:

(1) A waste tire accumulation on the premises of a facility which has been issued a permit by the secretary pursuant to K.S.A. 65-3407 or 65-3424b, and amendments thereto, and managed in accordance with the conditions of such permit; or

(2) a waste tire accumulation which is exempt from the waste tire collection center permit requirement pursuant to K.S.A. 65-3424b, and amendments thereto.

(f) **"Mobile waste tire processor"** means a person who processes waste tires at other than a fixed site.

(g) **"Process"** means: (1) Cut or otherwise alter whole waste tires so that they are no longer whole; or (2) bale for disposal or beneficial use.

(h) **"Store"** or **"storage"** means the placing of waste tires in a manner that does not constitute disposal of the waste tires. Storage includes the beneficial use of waste tires as silo covers and such other beneficial uses as the secretary determines do not create health or environmental risks.

(i) **"Tire"** means a continuous solid or pneumatic rubber covering used to encircle the wheel of a vehicle or aircraft, or an innertube of such a covering.

(j) **"Tire retailer"** means a person in the business of selling new or used replacement tires at retail.

(k) **"Used tire"** means a tire that: (1) Has been removed from a wheel following a period of use or remains on a wheel removed from a vehicle or aircraft following a period of use; and (2) has been determined to have value in accordance with rules and regulations established pursuant to subsection (e)(7) of K.S.A. 65-3424b, and amendments thereto.

(l) **"Vehicle"** has the meaning provided by K.S.A. 8-1485, and amendments thereto, and includes implements of husbandry, as defined by K.S.A. 8-1427, and amendments thereto.

(m) **"Waste tire"** means a whole tire that: (1) Has been removed from a wheel following a period of use or remains on a wheel removed from a vehicle or aircraft following a period of use; and (2) is no longer suitable for its original intended purpose because of wear, damage or defect.

(n) **"Waste tire collection center"** means a site where used or waste tires are collected from the public or from customers of a business prior to being offered for recycling or disposal.

(o) **"Waste tire processing facility"** means a fixed site where equipment is used to process waste tires.

History: L. 1990, ch. 319, § 1; L. 1991, ch. 197, § 1; L. 1996, ch. 173, § 1; L. 2000, ch. 103, § 1; L. 2001, ch. 126, § 1; L. 2003, ch. 130, § 16; July 1.

65-3424a. Restrictions on disposal. No person shall:

(a) Maintain an illegal waste tire accumulation;

(b) transfer ownership of waste tires to any person unless the recipient: (1) Has been issued a permit by the secretary pursuant to K.S.A. 65-3407, and amendments thereto, or K.S.A. 65-3424b, and amendments thereto; (2) intends to use the waste tires for a beneficial use; or (3) is a tire retailer who collects waste tires from the public or other tire retailers in the ordinary course of business;

(c) deposit waste tires in a landfill as a method of ultimate disposal, except that the secretary may authorize, by rules and regulations or by permits issued pursuant to K.S.A. 65-3407, and amendments thereto: (A) The final disposal of processed waste tires at permitted municipal solid waste landfills and permitted waste tire monofills; (B) the final disposal of contaminated whole, unprocessed waste tires at permitted municipal solid

waste landfills and permitted waste tire monofills; (C) the use of waste tires in their original state as part of or supplemental to a proven and approved leachate collection system at a landfill; (D) the use of waste tires which have been cut into two or more parts as daily cover material for a landfill; or (E) the final disposal of small numbers of whole, unprocessed waste tires in landfills if such tires are intermingled with other solid waste and retrieval of such tires would be hazardous; or

(d) receive money in exchange for waste tires unless: (A) The person holds a permit issued by the secretary pursuant to K.S.A. 65-3407 or 65-3424b, and amendments thereto; or (B) the person is a tire retailer who collects waste tires from the public or from other tire retailers in the ordinary course of business. **History:** L. 1990, ch. 319, § 2; L. 1991, ch. 197, § 2; L. 1994, ch. 283, § 5; L. 1996, ch. 173, § 2; L. 2000, ch. 103, § 2; L. 2001, ch. 126, § 2; L. 2003, ch. 130, § 17; July 1.

65-3424b. Permits and standards. (a) The secretary shall establish a system of permits for mobile waste tire processors, waste tire processing facilities, waste tire transporters and waste tire collection centers. Such permits shall be issued for a period of one year and shall require an application fee established by the secretary in an amount not exceeding \$250 per year.

(b) The secretary shall adopt rules and regulations establishing standards for mobile waste tire processors, waste tire processing facilities, waste tire collection centers and waste tire transporters. Such standards shall include a requirement that the permittee file with the secretary a bond or other financial assurance in an amount determined by the secretary to be sufficient to pay any costs which may be incurred by the state to process any waste tires or dispose of any waste tires or processed waste tires if the permittee ceases business or fails to comply with this act.

(c) Any person who contracts or arranges with another person to collect or transport waste tires for storage, processing or disposal shall so contract or arrange only with a person holding a permit from the secretary. Any person contracting or arranging with a person, permitted by the secretary, to collect or transport waste tires for storage, processing or, disposal, transfers ownership of those waste tires to the permitted person and the person contracting or arranging with the person holding such permit to collect or transport such tires shall be released from liability therefor. Any person contracting or arranging with any person, for the collection, transportation, storage, processing, disposal or beneficial use of such tires shall maintain a record of such transaction for a period of not less than three years following the date of the transfer of such tires. Record-keeping requirements for beneficial use shall not apply when tire retailers allow customers to retain their old tires at the time of sale.

(d) The owner or operator of each site that contains a waste tire, used tire or new tire accumulation of any size must control mosquito breeding and other disease vectors.

(e) No person shall own or operate a waste tire processing facility or waste tire collection center or act as a mobile waste tire processor or waste tire transporter unless such person holds a valid permit issued therefor pursuant to subsection (a), except that:

(1) A tire retreading business where fewer than 1,500 waste tires are kept on the business premises may operate a waste tire collection center on the premises;

(2) a business that, in the ordinary course of business, removes tires from motor vehicles where fewer than 1,500 of these tires are kept on the business premises may operate a waste tire collection center or a waste tire processing facility or both on the premises;

(3) a retail tire-selling business where fewer than 1,500 waste tires are kept on the business premises may operate a waste tire collection center or a waste tire processing facility or both on the premises;

(4) the Kansas department of wildlife, parks and tourism may perform one or more of the following to facilitate a beneficial use of waste tires: (A) Operate a waste tire collection center on the premises of any state park, state wildlife area or state fishing lake; (B) operate a waste tire processing facility on the premises of any state park, state wildlife area or state fishing lake; or (C) act as a waste tire transporter to transport waste tires to any state park, state wildlife area or state fishing lake;

(5) a person engaged in a farming or ranching activity, including the operation of a feedlot as defined by K.S.A. 47-1501, and amendments thereto, may perform one or more of the following to facilitate a beneficial use of waste tires: (A) Operate an on-site waste tire collection center; (B) operate an on-site waste tire processing facility; or (C) act as a waste tire transporter to transport waste tires to the farm, ranch or the feedlot;

(6) a watershed district may perform one or more of the following to facilitate a beneficial use of waste tires: (A) Operate a waste tire collection center on the premises of a watershed district project or work of improvement; (B) operate a waste tire processing facility on the district's property; or (C) act as a waste tire transporter to transport waste tires to the district's property;

(7) a person may operate a waste tire collection center if: (A) Fewer than 1,500 used tires are kept on the premises; or (B) 1,500 or more used tires are kept on the premises, if the owner demonstrates through sales and inventory records that such tires have value, as established in accordance with standards adopted by rules and regulations of the secretary;

(8) local units of government managing waste tires at solid waste processing facilities or solid waste disposal areas permitted by the secretary under the authority of K.S.A. 65-3407, and amendments thereto, may perform one or more of the following in accordance with the conditions of the solid waste permit: (A) Operate a waste tire collection center on the premises of the permitted facility; (B) operate a waste tire processing facility on the premises of the permitted facility; (C) act as a waste tire transporter to transport waste tires to the permitted facility; or (D) act as a mobile waste tire processor;

(9) a person may act as a waste tire transporter to transport: (A) Waste tires mixed with other municipal solid waste; (B) fewer than five waste tires for lawful disposal; (C) waste tires generated by the business, farming activities of the person or the person's employer; (D) waste tires for a beneficial use approved by statute, rules and regulations, or by the secretary; (E) waste tires from an illegal waste tire accumulation to a person who has been issued a permit by the secretary pursuant to K.S.A. 65-3407 or 65-3424b, and amendments thereto, provided approval has been obtained from the secretary; or (F) five to 50 waste tires for lawful disposal, provided the transportation act is a one time occurrence to abate a legal accumulation of waste tires; or

(10) a tire retailer that in the ordinary course of business also serves as a tire wholesaler to other tire retailers may act as a waste tire transporter to transport waste tires from those retailers back to a central location owned or operated by the wholesaler for consolidation and final disposal or recycling.

(f) All fees collected by the secretary pursuant to this section shall be remitted to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the waste tire management fund. **History:** L. 1990, ch. 319, § 3; L. 1991, ch. 197, § 3; L. 1996, ch. 173, § 3; L. 2001, ch. 5, § 245; L. 2001, ch. 167, § 3; L. 2003, ch. 130, § 18; L. 2012, ch. 47, § 86; July 1.

65-3424c. History: L. 1990, ch. 319, § 4; Repealed, L. 1991, ch. 197, § 9; July 1.

65-3424d. Tax on new tire sales. (a) In addition to any other tax imposed upon the retail sale of new vehicle tires, there is hereby imposed on retail sales of new vehicle tires (excluding innertubes), including new tires mounted on a vehicle sold at retail for the first time, an excise tax of \$.25 per vehicle tire. Such tax shall be paid by the purchaser of such tires and collected by the retailer thereof.

(b) The tax imposed by this section collected by the retailer shall become due and payable as follows: When the total tax for which any retailer is liable under this act does not exceed the sum of \$80 in any calendar year, the retailer shall file an annual return on or before January 25 of the following year; when the total tax liability does not exceed \$1,600 in any calendar year, the retailer shall file returns quarterly on or before the 25th day of the month following the end of each calendar quarter; when the total tax liability exceeds \$1,600 in any calendar year, the retailer shall file a return for each month on or before the 25th day of the following month. Each person collecting the tax imposed pursuant to this section shall make a true report to the department of revenue, on a form prescribed by the secretary of revenue, providing such information as may be necessary to determine the amounts of taxes due and payable hereunder for the applicable month or months, which report shall be accompanied by the tax disclosed thereby. Records of sales of new tires shall be kept separate and apart from the records of other retail sales made by the person charged to collect the tax imposed pursuant to this section in order to facilitate the examination of books and records as provided herein.

(c) The secretary of revenue or the secretary's authorized representative shall have the right at all reasonable times during business hours to make such examination and inspection of the books and records of the person

required to collect the tax imposed pursuant to this section as may be necessary to determine the accuracy of such reports required hereunder.

(d) The secretary of revenue is hereby authorized to administer and collect the tax imposed by this section and to adopt such rules and regulations as may be necessary for the efficient and effective administration and enforcement of the collection thereof. Whenever any person liable to collect the taxes imposed hereunder refuses or neglects to pay them, the amount, including any penalty, shall be collected in the manner prescribed for the collection of the retailers' sales tax by K.S.A. 79-3617, and amendments thereto.

(e) The secretary of revenue shall remit all revenue collected under the provisions of this section to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the waste tire management fund.

(f) Whenever, in the judgment of the secretary of revenue, it is necessary, in order to secure the collection of any taxes, penalties or interest due, or to become due, under the provisions of this act, the secretary may require any person charged with the collection of such tax to file a bond with the director of taxation under conditions established by and in such form and amount as prescribed by rules and regulations adopted by the secretary.

(g) The secretary of revenue and the secretary of health and environment shall cooperate to: (1) Ensure that retailers required to collect the tax imposed by this section collect such tax on sales of tires for all vehicles, as defined by K.S.A. 65-3424, and amendments thereto; and (2) develop and distribute to tire retailers educational materials that emphasize appropriate waste tire management practices. **History:** L. 1990, ch. 319, § 5; L. 1991, ch. 197, § 4; L. 1992, ch. 50, § 1; L. 1993, ch. 52, § 1; L. 1996, ch. 173, § 4; L. 2001, ch. 5, § 246; L. 2001, ch. 167, § 4; July 1.

65-3424e. Same; failure to pay tax; penalties. (a) If any person fails to pay taxes when required by K.S.A. 65-3424d, there shall be added to the unpaid balance of the fees interest at the rate per month prescribed by subsection (a) of K.S.A. 79-2968 and amendments thereto from the date taxes were due until paid.

(b) If any person due to negligence or intentional disregard fails to file a report or pay the taxes due at the time required by or under the provisions of K.S.A. 65-3424d, there shall be added to the tax a penalty in an amount equal to 10% of the unpaid balance of taxes due.

(c) If any person fails to make a report, or to pay any taxes, within 60 days from the date the report or taxes were due, except in the case of an extension of time granted by the secretary of revenue, there shall be added to the taxes due a penalty equal to 25% of the amount of such tax.

(d) If any person, with fraudulent intent, fails to pay any tax or make, render or sign any report, or to supply any information, within the time required by or under the provisions of K.S.A. 65-3424d, there shall be added to the tax a penalty in an amount equal to 50% of the unpaid balance of the tax due.

(e) Penalty or interest applied under the provisions of subsections (a) and (d) shall be in addition to the penalty added under any other provisions of this section, but the provisions of subsections (b) and (c) shall be mutually exclusive of each other.

(f) Whenever, in the judgment of the secretary of revenue, the failure of a person to comply with the provisions of subsection (b) or (c) was due to reasonable causes and not willful neglect, the secretary of revenue may waive or reduce any of the penalties upon making a record of the reasons therefor.

(g) In addition to all other penalties provided by this section, any person who willfully fails to make a report or to pay over any tax imposed under K.S.A. 65-3424d, who makes a false or fraudulent report, who fails to keep any books or records necessary to determine the accuracy of the person's reports, who willfully violates any rules and regulations of the secretary of revenue for the enforcement and administration of the provisions of K.S.A. 65-3424d or this section, who aids and abets another in attempting to evade the payment of any tax imposed by K.S.A. 65-3424d or who violates any other provision of K.S.A. 65-3424d or this section shall, upon conviction thereof, be fined not less than \$100 nor more than \$1,000, or be imprisoned in the county jail not less than one month nor more than six months, or be both so fined and imprisoned, in the discretion of the court.

History: L. 1990, ch. 319, § 6; July 1.

65-3424f. History: L. 1990, ch. 319, § 7; L. 1991, ch. 197, § 5; L. 1994, ch. 283, § 6; L. 1996, ch. 38, § 1; L. 1996, ch. 173, § 5; L. 1996, ch. 183, § 2; L. 2000, ch.103, § 3; Repealed, L. 2001, ch. 126, § 9, July 1.

65-3424g. Waste tire management fund. (a) There is hereby established in the state treasury the waste tire management fund.

(b) Money from the following sources shall be credited to the waste tire management fund:

- (1) Revenue collected from the excise tax by K.S.A. 65-3424d, and amendments thereto;
- (2) permit application and renewal fees provided for by K.S.A. 65-3424b, and amendments thereto;
- (3) interest provided for by subsection (f);
- (4) additional sources of funding such as reimbursements and appropriations intended to be used for the purposes of the fund;
- (5) any recoveries from abatement and enforcement actions provided for by K.S.A. 65-3424k, and amendments thereto; and
- (6) any other moneys provided by law.

(c) Moneys in the waste tire management fund shall be used only for the purpose of:

(1) Paying compensation and other expenses of employing personnel to carry out the duties of the secretary pursuant to K.S.A. 65-3424 through 65-3424h, and amendments thereto, but not more than \$250,000;

(2) action by the department to implement interim measures to minimize nuisances or risks to public health or the environment that are or could be created by waste tire accumulations, until the responsible party can fully abate the site or until a state clean-up occurs pursuant to K.S.A. 65-3424k, and amendments thereto;

(3) action by the department to pay for the removal and disposal or on-site stabilization of waste tires which have been illegally accumulated or illegally managed, when the responsible party is unknown or unwilling or unable to perform the necessary corrective action;

(4) the costs of using contractors to provide: (A) Public education regarding proper management of waste tires; (B) technical training of persons on the requirements of solid waste laws and rules and regulations relating to waste tires; and (C) services described in subsection (i) of K.S.A. 65-3424k, and amendments thereto;

(5) grants to public or private entities for up to 50% of the cost to start-up or enhance projects to recycle waste tires or recover energy through waste tire combustion; and

(6) grants to local units of government and any public or private school for grades kindergarten through twelve to pay up to 50% of the costs to purchase tire derived products made from recycled waste tires. As used in this section, "tire derived products" means athletic field surfacing, playground cover, horticulture products and molded or extruded rubber products made from recycled waste tires.

(d) All grant applications received for waste tire recycling grants shall be reviewed by the solid waste grants advisory committee established pursuant to K.S.A. 65-3426, and amendments thereto. Waste tire recycling grants shall be subject to the requirements set forth in subsection (g) of K.S.A. 65-3415, and amendments thereto, related to the misuse of grant funds with the exception that any grant funds recovered by the secretary shall be deposited to the waste tire management fund. Waste tire management funds shall be used only for waste tire recycling grants. Waste tire grants shall not be awarded, nor shall waste tire funds be disbursed to a grant recipient, if the department determines that the grant applicant or recipient is operating in substantial violation of applicable environmental laws or regulations administered by the department.

(e) All expenditures from the waste tire management fund shall be made in accordance with appropriations acts upon warrants of the director of accounts and reports issued pursuant to vouchers approved by the secretary.

(f) On or before the 10th of each month, the director of accounts and reports shall transfer from the state general fund to the waste tire management fund interest earnings based on: (1) The average daily balance of moneys in the waste tire management fund for the preceding month; and (2) the net earnings rate for the pooled money investment portfolio for the preceding month. **History:** L. 1990, ch. 319, § 8; L. 1991, ch. 197, § 7; L. 1994, ch. 283, § 7; L. 1996, ch. 253, § 38; L. 2000, ch. 103, § 4; L. 2001, ch. 126, § 5; L. 2003, ch. 130, § 19; L. 2007, ch. 118, § 1; L. 2009, ch. 117, § 2; July 1.

65-3424h. Same; rules and regulations. The secretary shall adopt such rules and regulations as necessary to administer and enforce the provisions of this act. **History:** L. 1990, ch. 319, § 9; July 1.

65-3424i. Tire retailers; requirements. (a) Except as provided by subsection (b), no tire retailer shall refuse to accept waste tires from customers.

(b) A tire retailer may: (1) Ask customers if they wish to retain their old tires at the time of sale; (2) refuse to accept more tires from a customer than purchased by that customer at the time of sale; or (3) refuse to accept waste tires from a customer purchasing replacement tires for commercial use if the tire retailer does not mount such replacement tires.

(c) Tire retailers shall prominently display or make available to customers educational materials provided by the department of health and environment and department of revenue relating to proper waste tire management practices. **History:** L. 1991, ch. 197, § 6; L 1996, ch. 173, § 8; July 1.

65-3424j. History: L. 1990, ch. 319, § 5; L. 1991, ch. 197, § 4; L. 1992, ch. 50, § 1; L. 1993, ch. 274, § 6; Repealed, L. 1994, ch. 283, § 10; May 5.

65-3424k. Abatement and enforcement actions by secretary. (a) The secretary may undertake appropriate abatement action and may enter into contracts for the abatement of illegal waste tires accumulations or illegally managed waste tires utilizing funds from the waste tire management fund.

(b) Any authorized representative of the secretary may enter, at reasonable times and upon written notice, onto any property or premises where an accumulation of waste tires is located to conduct: (1) An inspection and site assessment to determine whether the accumulation creates a nuisance or risk to public health and safety or to the environment; or (2) interim measures to minimize risk to public health and safety or to the environment.

(c) Whenever the secretary has reason to believe that an accumulation of waste tires creates a nuisance or risk to public health and safety or to the environment or is in violation of rules and regulations adopted by the secretary or conditions of a permit issued by the secretary, the secretary may require the person or persons responsible for the accumulation to carry out abatement activities. Such abatement activities shall be performed in accordance with a plan approved by the secretary. The secretary shall give notice, by letter, to the property owner and responsible parties that the waste tires constitute a nuisance or risk to public health or the environment, and that the waste tire accumulation must be abated within a specified period. The secretary may undertake abatement action utilizing funds from the waste tire management fund if the responsible parties fail to take the required action within the time period specified in the notice.

(d) The department and its representatives are authorized to enter private property to perform abatement activities if the responsible party fails to perform required clean-up work, but no entry shall be made without the property owner's consent except upon notice and hearing in accordance with the Kansas administrative procedure act.

(e) All costs incurred by the secretary in the abatement of illegal waste tires accumulations or illegally managed waste tires or in performing interim measures, including administrative and legal expenses, are recoverable from a responsible party or parties and may be recovered in a civil action in district court brought by the secretary. Any abatement costs recovered under this section shall be remitted to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the waste tire management fund. An action to recover abatement or interim measures costs may be commenced at any stage of an abatement.

(f) In performing or entering contracts for abatement actions under this section, the secretary shall give preference to actions that recycle waste tires or burn waste tires for energy recovery. Direct abatement expenditures may include landfilling when waste tires are contaminated or when feasible in-state markets cannot be identified.

(g) Permits granted by the secretary pursuant to K.S.A. 65-3424b, and amendments thereto, shall not be transferable and may be revoked or suspended whenever the secretary determines that the permit holder is operating in violation of this act or rules and regulations adopted pursuant to the act; is creating or threatens to

create a hazard to persons, property or the environment; or is creating or threatens to create a public nuisance. The secretary may also revoke, suspend or refuse to issue a permit when the secretary determines that past or continuing violations of the provisions of K.S.A. 65-3409, and amendments thereto, have been committed by the applicant or permit holder.

(h) Neither the state of Kansas nor the waste tire management fund shall be liable to any owner, operator or responsible party for the loss of business, damages or taking of property associated with any abatement or enforcement action taken pursuant to this section.

(i) The secretary shall enter into contracts with one or more associations of tire retailers to: (1) Assist in disseminating information to all tire retailers on the requirements of solid waste laws and rules and regulations relating to waste tires; (2) establish a point of contact for persons requesting information on solid waste laws and rules and regulations relating to waste tires; (3) assist in planning and implementing conferences, workshops, and other requested training events for persons involved in the generation, transportation, processing, or disposal of waste tires; and (4) assemble and analyze data on waste tire management by tire retailers in Kansas. **History:** L. 1994, ch. 283, § 8; L. 1996, ch. 173, § 9; L. 2001, ch. 126, § 6; L. 2001, ch. 167, § 5; L. 2003, ch. 130, § 20; July 1.

65-3424l. Vehicle tire disposal; hearings and review of orders and decisions of secretary. (a) Any person adversely affected by any order or decision of the secretary pursuant to K.S.A. 65-3424 through 65-3424i, and amendments thereto, may, within 15 days of service of the order or decision, request in writing a hearing. Hearings under this section shall be conducted in accordance with the provisions of the Kansas administrative procedure act.

(b) Any person adversely affected by any action of the secretary pursuant to this act may obtain review of such action in accordance with the Kansas judicial review act. **History:** L. 1994, ch. 283, § 9; L. 2010, ch. 17, § 147; July 1.

65-3424m. History: L. 1996, ch. 173, § 6; L. 2000, ch. 103, § 5; L. 2001, ch. 126, § 7; L.2003, ch. 130 § 22; July 1.

65-3425. Plastic bottles and containers; labeling requirements; violations; penalties. (a) As used in this section:

(1) "Code" means a molded, imprinted or raised symbol.

(2) "Person" means any individual, association, partnership, limited partnership, corporation or other entity.

(3) "Plastic" means any material made of polymeric organic compounds and additives that can be shaped by flow.

(4) "Plastic bottle" means a plastic container which: (A) Has a neck that is smaller than the body of the container; (B) accepts a screw-type, snap-cap or other closure; and (C) has a capacity of 16 fluid ounces or more but less than five gallons.

(5) "Rigid plastic container" means any formed or molded container other than a bottle, intended for single use, composed predominantly of plastic resin and having a relatively inflexible finite shape or form with a capacity of eight ounces or more but less than five gallons.

(b) No person shall distribute, sell or offer for sale in this state any plastic bottle or rigid plastic container, unless it is labeled with a nationally recognized code indicating the plastic resin used to produce the bottle or container. The nationally recognized code shall appear on or near the bottom of the bottle or container.

(c) If the attorney general or county or district attorney has reason to believe that a person is violating the provisions of this section, the attorney general or county or district attorney shall give the person written notice thereof. If, after such notice is given, the attorney general or county or district attorney has reason to believe that the person is continuing to violate the provisions of this section, the attorney general or county or district attorney may bring an action to enjoin the violation and to recover a civil penalty of \$50 for each violation but not exceeding a total of \$500. Any such penalty recovered by the attorney general shall be deposited in the state treasury and credited to the state general fund. Any such penalty recovered by the county or district attorney

shall be deposited in the general fund of the county in which the violation occurred. **History:** L. 1993, ch. 57, § 1; L. 2014, H.B. 2551; July 1.

65-3426. Solid waste grants advisory committee. (a) There is hereby established within the department of health and environment the solid waste grants advisory committee, which shall be composed of eight members as follows:

(1) Seven members appointed by the governor, two of whom shall represent the interests of regional solid waste management entities, two of whom shall represent the interests of counties, one of whom shall represent the interests of cities, one of whom shall represent the interests of waste tire generators or handlers and one of whom shall represent the interests of the private sector;

(2) the secretary of health and environment or the secretary's designee.

(b) Appointive members of the solid waste grants advisory committee shall serve terms of two years. The secretary of health and environment or the person designated by the secretary shall serve as chairperson of the advisory committee.

(c) Members of the solid waste grants advisory committee shall receive amounts provided by subsection (e) of K.S.A. 75-3223, and amendments thereto, for each day of actual attendance at any meeting of the advisory committee or any subcommittee meeting authorized by the advisory committee.

(d) The secretary of health and environment shall provide technical support related to the activities of the solid waste grants advisory committee, including but not limited to establishing project selection criteria, performing technology evaluations, assessing technical feasibility and determining consistency with the statewide solid waste management plan, the applicable county or regional solid waste management plan and regional activities.

(e) In accordance with schedules established by the secretary of health and environment, the solid waste grants advisory committee shall meet to review competitive grant applications submitted pursuant to subsection (b) of K.S.A. 65-3415, and amendments thereto. The advisory committee shall establish a project priority list for each fiscal year based upon the availability of funds as estimated by the secretary and shall make recommendations regarding the selection of grantees and the disbursement of moneys. **History:** L. 1995, ch. 221, § 4; L. 2001, ch. 126, § 8; L. 2003, ch. 130, § 21; July 1.

65-3427. Limitation on number of employees for solid waste management. The number of full-time and regular part-time positions equated to full-time, excluding seasonal and temporary positions, for the department of health and environment for any solid waste management programs and functions pursuant to K.S.A. 65-3401 through 65-3425, and amendments thereto, shall not exceed 44. **History:** L. 1995, ch. 221, § 6; July 1.

65-3428, 65-3429. Reserved.

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Kansas Administrative Regulations

Article 29.-Solid Waste Management

DEFINITIONS AND ADMINISTRATIVE PROCEDURES

28-29-1. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended May 1, 1982; revoked May 10, 1996.)

28-29-1a. Modification of obsolete references and text . The following modifications shall be made to article 29:

- (a) In K.A.R. 28-29-23(t), “K.A.R. 28-31-3” shall be replaced with “K.A.R. 28-31-261.”
- (b) In K.A.R. 28-29-23a(c)(8), the phrase “K.A.R. 28-31-3 and K.A.R. 28-29-4” shall be replaced with “K.A.R. 28-31-261.”
- (c) In K.A.R. 28-29-27(g)(3), “K.A.R. 28-31-9” shall be replaced with “K.A.R. 28-31-270.”
- (d) In K.A.R. 28-29-102, the following modifications shall be made:
 - (1) In paragraph (l)(2)(A), “K.A.R. 28-15-11” shall be replaced with “K.A.R. 28-16-28b(fff).”
 - (2) In paragraph (l)(2)(B), “K.A.R. 28-15-11” shall be replaced with “K.S.A. 65-162a, and amendments thereto.”
- (e) In K.A.R. 28-29-108, the following modifications shall be made:
 - (1) In subsection (a), the phrase “K.A.R. 28-31-3 and K.A.R. 28-31-4” shall be replaced with “K.A.R. 28-31-261.”
 - (2) In paragraph (h)(1), “K.A.R. 28-19-47” shall be replaced with “K.A.R. 28-19-647.”
- (f) In K.A.R. 28-29-109(b)(6) and (7)(B)(i), “K.A.R. 28-31-3” shall be replaced with “K.A.R. 28-31-261.”
- (g) In K.A.R. 28-29-300(a)(5), “K.A.R. 28-31-4” shall be replaced with “K.A.R. 28-31-261.”
- (h) In K.A.R. 28-29-1100, the following modifications shall be made:
 - (1) In paragraph (b)(1), “K.A.R. 28-31-4 (b)” shall be replaced with “K.A.R. 28-31-261.”
 - (2) In paragraph (b)(3), the following modifications shall be made:
 - (A) “ ‘Small quantity generator’ ” shall be replaced with “ ‘Conditionally exempt small quantity generator.’ ”
 - (B) “K.A.R. 28-31-2” shall be replaced with “K.A.R. 28-31-260a.”
 - (3) In paragraph (b)(4), the phrase “defined by the United States department of transportation and adopted by reference in K.A.R. 28-31-4 (e)” shall be replaced with “as listed in 49 CFR 173.2, as in effect on October 1, 2009, which is hereby adopted by reference.”
 - (4) In subsection (c), each occurrence of the term “K.A.R. 28-31-16” shall be replaced with “K.A.R. 28-31-279 and K.A.R. 28-31-279a.”
 - (5) In subsection (d), “[s]mall quantity generator” shall be replaced with “Conditionally exempt small quantity generator.”
 - (6) In subsections (d) and (e), each occurrence of the term “SQG” shall be replaced with “CESQG.”
- (i) In K.A.R. 28-29-1102, the following modifications shall be made:
 - (1) Paragraphs (b)(2)(C), (b)(2)(C)(i), and (b)(2)(C)(ii) shall be replaced with the following text: “All HHW that is transferred for treatment, storage, or disposal shall be manifested as hazardous waste. All applicable hazardous waste codes for each waste shall be listed on the manifest, using all available information. HHW facilities shall not be required to submit samples for laboratory testing in order to determine hazardous waste codes.”
 - (2) In paragraph (b)(2)(D), “K.A.R. 28-31-14” shall be replaced with “K.A.R. 28-31-268.”
 - (3) Paragraph (b)(2)(E) shall be replaced with the following text: “All HHW that is transferred for treatment, storage, or disposal shall be prepared for transportation off-site as hazardous waste.”
 - (4) In paragraph (b)(2)(F)(i), “K.A.R. 28-31-15” shall be replaced with “K.A.R. 28-31-273.”
- (j) In K.A.R. 28-29-1103(c), the phrase “meeting the USDOT manufacturing and testing specifications for transportation of hazardous materials, as adopted by reference in K.A.R. 28-31-4 (e)” shall be replaced with “that are compatible with the waste.”

- (k) In K.A.R. 28-29-1107(a)(2)(D), “small quantity generator” shall be replaced with “conditionally exempt small quantity generator.” (Authorized by and implementing K.S.A. 65-3406; effective Nov. 28, 2011.)

28-29-2. Variances.

- (a) **General procedure.** If exceptional circumstances make strict conformity with these regulations impractical or not feasible, a person may submit a written request for a variance from these regulations. The department may grant a variance from these regulations and stipulate conditions and time limitations as necessary to comply with the intent of all applicable state and federal laws. The department shall review the variance request and notify the person within ninety (90) days of receipt that the application is approved, denied, or requires modification.
- (b) **Experimental operations.** Variances may be granted to facilitate experimental operations intended to develop new methods or technology. Variances for experimental operations shall be considered only where significant health, safety, environmental hazards, or nuisances will not be created, and when a detailed proposal is submitted and accepted which sets forth the objectives, procedures, controls, monitoring, reporting, time frame, and other data regarding the experiment.
- (c) **Restrictions.** Variances for experimental operations shall be limited to a maximum of two (2) years; however, the department may renew the variance for one or more additional two-year periods upon a showing by the person that the need for a variance continues to be valid. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-3. Definitions.

- (a) **"Active area"** means any solid waste disposal area that has received solid waste and has fewer than 12 inches of soil cover.
- (b) **"Agricultural waste"** means solid waste resulting from the production of farm or agricultural products.
- (c) **"Air pollution"** means the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as is, or tends significantly to be injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or property.
- (d) **"Aquifer"** means saturated soils and geologic materials that are capable of recharging a well within 24 hours and whose boundaries can be identified and mapped from hydrogeologic data. This term shall include all hydraulically connected aquifers.
- (e) **"Backyard composting"** means a composting operation that does not distribute the finished compost for use off-site and that meets one of the following conditions:
- (1) The materials are all compostable and are generated by no more than four single residences, or the equivalent of four single residences.
 - (2) The material being composted consists entirely of yard waste, and the volume of material being composted is less than 10 cubic yards.
- (f) **"Bulky waste"** means items of refuse too large to be placed in refuse storage containers, including appliances, furniture, tires, large auto parts, motor vehicles, trees, branches, and stumps.
- (g) **"By-product"** means a material produced without separate commercial intent during the manufacture or processing of other materials or mixtures.
- (h) **"Commercial waste"** means all solid waste emanating from establishments engaged in business, including solid waste originating in stores, markets, office buildings, restaurants, shopping centers, and theaters.
- (i) **"Composting"** means a controlled process of microbial degradation of organic material into a stable, nuisance-free, humus-like product. This term shall not include the following:
- (1) Manure storage piles, whether turned to stabilize or not turned; and
 - (2) yard waste directly applied to agricultural land.
- (j) **"Composting area"** means the area used for receiving, processing, curing, and storing compostable materials and compost.
- (k) **"Design period"** means the period consisting of the operating life of the solid waste landfill facility and the postclosure care period.

- (l) **"Detection monitoring system"** means a network of wells established to detect any releases of contaminants from a landfill unit.
- (m) **"Director"** means the director of the division of environment, Kansas department of health and environment.
- (n) **"Discarded material"** means one of the following:
 - (1) Material that has been abandoned or disposed of; or
 - (2) a by-product or residual, when it is either in treatment or in storage or when it is used in a manner that constitutes disposal.
- (o) **"Disease vector"** means rodents, flies, mosquitos, or other pests capable of transmitting disease to humans.
- (p) **"Disturbed area"** means those areas within a facility that have been physically altered during waste disposal operations or during the construction of any part of the facility.
- (q) **"Existing unit"** means a municipal solid waste disposal unit that is completely constructed and receiving waste before the appropriate date specified in K.A.R. 28-29-100.
- (r) **"Facility"** means a site and all equipment and fixtures on a site used to process or dispose of solid waste. A facility consists of the entire solid waste processing or disposal operation. All structures used in connection with the waste processing or disposal operation, including any structures used to facilitate the processing or disposal, shall be considered a part of the facility, including the following:
 - (1) Solid waste disposal units;
 - (2) buildings;
 - (3) treatment systems;
 - (4) processing and storage operations; and
 - (5) monitoring stations.
- (s) **"Garbage"** means the animal and vegetable waste resulting from the handling, processing, storage, packaging, preparation, sale, cooking, or serving of meat, produce, or other foods and shall include unclean containers.
- (t) **"Gas collection system"** means a system of wells, trenches, pipes, and other related ancillary structures, including manholes, compressor housings, and monitoring installations, that collect and transport the gas produced in a solid waste landfill to one or more gas processing points. The flow of gas through such a system can be produced by naturally occurring gas pressure gradients or can be aided by an induced draft generated by mechanical means.
- (u) **"Gas venting system"** means a system of wells, trenches, pipes, and other related structures that vents the gas produced in a solid waste landfill to the atmosphere.
- (v) **"Geomembrane"** means a membrane with a very low permeability, which means approximately 1×10^{-12} cm/sec, that is used with a foundation of soil, rock, earth, or any other geotechnical, engineering-related material as an integral part of a human-made structure or system designed to limit the movement of liquid or gas in the system.
- (w) **"Geotextile"** means any permeable textile used with soil, rock, earth, or any other geotechnical, engineering-related material as an integral part of a human-made structure or system designed to perform functions including any of the following:
 - (1) Provide planar flow for drainage;
 - (2) filter particulates from a liquid; or
 - (3) serve as a cushion to protect geomembranes.
- (x) **"Groundwater"** means that part of subsurface water in the ground that is in the zone of saturation.
- (y) **"Incineration"** means the controlled process of burning solid, liquid, and gaseous combustible wastes for volume and weight reduction in facilities designed for that use.
- (z) **"Incinerator"** means any device or structure used for the destruction or volume reduction of solid waste by combustion pursuant to disposal or salvaging operations.
- (aa) **"Land surveyor"** means a person who has received a license to practice land surveying from the state board of technical professions pursuant to K.S.A. 74-7001 et seq., and amendments thereto.
- (bb) **"Leachate"** means liquid that has been or is in direct contact with solid waste or the active area of a solid waste disposal unit.

- (cc) **"Licensed geologist"** means a person who has received a license to practice geology from the Kansas state board of technical professions pursuant to K.S.A. 74-7001 et seq., and amendments thereto.
- (dd) **"Lift"** means an accumulation of waste that is compacted into a unit and over which daily cover material is normally placed.
- (ee) **"Long-term care"** means the maintenance of all appurtenances and systems installed or used in the containment of solid wastes and the maintenance of the effective performance of leachate or gas collection, treatment, and disposal systems installed for use during the postclosure care period at a solid waste disposal area or a solid waste processing facility.
- (ff) **"Mixed refuse"** means a mixture of solid wastes containing both putrescible and nonputrescible materials.
- (gg) **"Monofill"** means a landfill in which 90 percent or more of the waste disposed is restricted to one specified waste.
- (1) All other waste disposed of in a monofill shall meet both of the following requirements:
 - (A) The waste shall be associated with the process that produced the specified waste.
 - (B) The waste shall have characteristics similar to those of the specified waste and shall have similar and limited potential hazards to human health and the environment.
 - (2) Clean rubble, as defined in K.S.A. 65-3402 and amendments thereto, may be disposed of in any monofill and shall not be considered in calculating the percentage of specified waste in the monofill.
- (hh) **"National pollutant discharge elimination system" and "NPDES"** shall have the meaning specified in K.A.R. 28-16-58.
- (ii) **"New facility" and "new unit"** mean a municipal solid waste landfill (MSWLF), as defined in K.S.A. 65-3402 and amendments thereto, or a unit at a facility for which either of the following conditions applies:
- (1) The MSWLF or unit is a permitted or unpermitted MSWLF or unit that has not accepted any waste before October 9, 1993.
 - (2) The MSWLF or unit is an existing MSWLF or unit whose lateral boundaries are increased after the effective date specified in K.A.R. 28-29-100.
- (jj) **"Nuisance"** means either of the following situations, if caused by or a result of the management of solid wastes in violation of the solid waste statutes in chapter 65, article 24, or the solid waste regulations in article 29 of these regulations:
- (1) A situation that is injurious to health or offensive to the senses or that obstructs the free use of property in a manner that interferes with the comfortable enjoyment of life or property; or
 - (2) a situation that adversely affects the entire community or neighborhood, or any substantial number of persons, even though the extent of the annoyance or damage inflicted on individuals is unequal.
- (kk) **"Official plan"** means a comprehensive plan submitted to and approved by the secretary as provided in K.S.A. 65-3405, and amendments thereto.
- (ll) **"100-year, 24-hour storm"** means a precipitation event of 24-hour duration with a one percent probability of occurring in any given year.
- (mm) **"On-site"** means on the premises where solid waste generation occurs, including two or more pieces of property that are divided only by public or private rights-of-way and that are otherwise contiguous.
- (nn) **"Open burning"** means the burning of any materials without all of the following characteristics:
- (1) Control of combustion air to maintain adequate temperature for efficient combustion;
 - (2) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and
 - (3) control of emission of the gaseous combustion products.
- (oo) **"Operating record"** means a compilation of reports, plans, specifications, monitoring data, and other information concerning facility operations. The operating record shall be kept on-site or at an alternate, secure location specified in the operating plan, in accordance with these regulations.
- (pp) **"Operator"** means the person or persons responsible for the operation and maintenance of a facility or part of a facility.
- (qq) **"Owner"** means the person or persons who own a facility or part of a facility.

- (rr) "**Permit**" means a written permit issued by the secretary that by its conditions may authorize the permittee to construct, install, modify, or operate a specified solid waste disposal area or solid waste processing facility.
- (ss) "**Permit area**" and "**permitted area**" mean the entire approved horizontal and vertical area occupied by a permitted solid waste processing or disposal facility.
- (tt) "**Point of compliance**" means a specified horizontal distance from the edge of a disposal unit's planned design. The point of compliance shall be the point at which an owner or operator demonstrates compliance with the liner performance standard, if applicable, and with the groundwater protection standard.
- (uu) "**Processing of wastes**" means the extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal.
- (vv) "**Professional engineer**" means a person who has registered with and obtained a license to practice engineering from the state board of technical professions pursuant to K.S.A. 74-7001 et seq., and amendments thereto.
- (ww) "**Publicly owned treatment works (POTW)**" means a treatment works that is owned by the United States of America, the state of Kansas, or a unit of local government. This definition shall include any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastewater. The definition shall include sewers, pipes, and other conveyances only if they convey wastewater to a POTW.
- (xx) "**Putrescible wastes**" means solid waste that contains organic matter capable of being decomposed by microorganisms and that is capable of attracting or providing food for birds and disease vectors.
- (yy) "**Qualified groundwater scientist**" means a licensed geologist or professional engineer who has sufficient training and experience in groundwater hydrology and related fields. Sufficient training may be demonstrated by a professional certification or by the completion of an accredited university program that enables the individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.
- (zz) "**Resource recovery**" means the recovery of material or energy from solid waste.
- (aaa) "**Run-off**" means water resulting from precipitation that flows overland from any part of a facility, except active areas, before the water enters a defined stream channel, and any portion of the overland flow that infiltrates into the ground before the water reaches the stream channel.
- (bbb) "**Run-on**" means any rainwater or surface water that flows onto any part of a facility.
- (ccc) "**Salvaging**" means the controlled removal of reusable materials from solid waste.
- (ddd) "**Sanitary landfill**" means a method of disposing of solid wastes on land without creating nuisances or hazards to the public health or safety or the environment at a permitted solid waste disposal area that meets the standards specified in K.A.R. 28-29-23.
- (eee) "**Scavenging**" means the removal of materials from a facility or unit that is not salvaging.
- (fff) "**Significant modifications**" means substantial alterations, changes, additions, or deletions to a facility, facility operations, facility ownership, or facility financial status that occur after permit issuance.
- (ggg) "**Small landfill**" and "small arid landfill" mean a municipal solid waste landfill that has been granted an exemption from the design requirements in K.A.R. 28-29-104, in accordance with K.A.R. 28-29-103.
- (hhh) "**Source-separated organic waste**" means organic material that has been separated from noncompostable material at the point of generation and shall include the following wastes:
- (1) Vegetative food waste;
 - (2) soiled or unrecyclable paper;
 - (3) sewage sludge;
 - (4) other wastes with similar properties, as determined by the department; and
 - (5) yard waste in combination with these materials.
- (iii) "**Special waste**" means any solid waste that, because of physical, chemical, or biological characteristics, requires special management standards due to concerns for owner or operator safety regarding handling, management, or disposal.
- (jjj) "**Static safety factor**" means the ratio between resisting forces or moments in a slope and the driving forces or moments that can cause a massive slope failure.

- (kkk) "Storage"** means the containment of solid wastes in a manner that shall not constitute disposal or processing, under one of the following conditions:
- (1) Precollection. Storage by the generator, on or adjacent to the premises, before initial collection. Under these regulations, precollection storage shall not require a processing facility permit.
 - (2) Postcollection. Storage by the processor or a collector, while the waste is awaiting processing or transfer to a disposal or recovery facility. Under these regulations, postcollection storage shall require a processing facility permit.
- (lll) "Surface impoundment"** means a natural topographic depression, a man-made excavation, or a diked area into which flowing wastes, including liquid wastes and wastes containing free liquids, are placed. For the purposes of these solid waste regulations, a surface impoundment shall not be considered a landfill.
- (mmm) "25-year, 24-hour storm"** means a precipitation event of 24-hour duration with a four percent probability of occurring in any given year.
- (nnn) "Unit" and "disposal unit"** mean a discrete area at a permitted landfill that is used for the final disposal of solid waste. These terms shall include the following means of disposal:
- (1) Trench;
 - (2) area fill; and
 - (3) cut and cover.
- (ooo) "Uppermost aquifer"** means the first aquifer likely to be impacted by contamination from the facility. This term shall include the migration pathway to the aquifer and shall extend to the first demonstrated aquiclude. This term shall also include perched water tables, which are locally elevated water tables above a discontinuous low-permeability layer that is within a relatively higher-permeability layer.
- (ppp) "Vegetative food waste"** means food waste and food processing waste from materials including fruits, vegetables, and grains. Vegetative food waste shall not refer to animal products or by-products, including dairy products, animal fat, bones, and meat.
- (qqq) "Vertical expansion"** means an increase in the design capacity of an existing unit by increasing the final elevation limit of the unit.
- (rrr) "Water pollution"** means contamination or alteration of the physical, chemical, or biological properties of any waters of the state that creates a nuisance or that renders these waters harmful to public health, safety, or welfare; harmful to the plant, animal, or aquatic life of the state; or unsuitable for beneficial uses.
- (sss) "Working face"** means any part of a solid waste disposal area where waste is being disposed of.
- (ttt) "Yard waste"** means vegetative waste generated from ordinary yard maintenance, including grass clippings, leaves, branches less than 0.5 inches in diameter, wood chips and ground wood less than 0.5 inches in diameter, and garden wastes. (Authorized by and implementing K.S.A. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended Oct. 1, 1999; amended May 30, 2003.)

28-29-4. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-5. (Authorized by K.S.A. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-6. Permits and engineering plans.

(a) Application for permits. Every person desiring to obtain a permit shall file an application for a permit for the proposed solid waste disposal area or processing facility with the department at least thirty (30) days before the date the person wishes to start construction, alteration, or operation of the disposal area or processing facility. The application shall be on forms furnished by the department.

(b) Design plans and engineering reports.

(1) Design and closure plans and engineering reports required under these regulations shall bear the seal and signature of a professional engineer licensed to practice in Kansas.

- (2) Waiver. Plans, designs, and relevant data for the construction of the following solid waste disposal areas and processing facilities, need not be prepared by a professional engineer provided that a review of these plans is conducted by a professional engineer licensed to practice in Kansas:
- (A) Solid waste processing facilities when the equipment is originally manufactured for those purposes and installation is supervised by the vendor, or when the equipment requires only fencing, buildings, and connection to utility lines to be operational;
 - (B) Construction and demolition landfills; and
 - (C) Solid waste disposal areas considered by the department to be located in secure geological formations, which are a part of a solid waste management system established pursuant to K.S.A. 65-3401 et seq., and which are expected to receive less than one hundred (100) tons of solid waste annually.
- (c) **Permit considerations.** Any permit issued by the secretary shall, where appropriate, be reviewed with respect to all responsibilities within the department.
- (d) **Transfer of permits.** Before any assignment, sale, conveyance, or transfer of all or any part of the property upon which a solid waste processing facility, or solid waste disposal area is or has been located, and before any change in the responsibility of operating a processing facility or disposal area is made, the permittee shall notify the department, in writing, of the intent to transfer title or operating responsibility, at least thirty (30) days in advance of the date of transfer. The person to whom the transfer is to be made shall not operate the solid waste processing facility or disposal area until the secretary issues a permit to that person. The person to whom the transfer is to be made shall submit the following:
- (1) A permit application and plans, maps, and data as required by subsection (a) of this regulation;
 - (2) Plans satisfactory to the department for correcting any existing permit violations; and
 - (3) Substantiation in writing that the applicant has copies of all approved maps, plans, and specifications relating to the solid waste processing facility or disposal area.
- (e) **Conformity with official plan.** Permits shall not be issued by the secretary until the applicant has secured, from the board of county commissioners or from the mayor of an incorporated city having an official plan, certification that the proposed facility is consistent with the official plan. This approval shall not be required when the official plan does not provide for management of the solid waste(s) to be processed or disposed.
- (f) **Reopening closed sites or facilities.** Any person proposing to reopen, excavate, disrupt, or remove any solid waste from any solid waste disposal area where operations have been terminated shall secure a new permit as specified in paragraph (a) of this regulation. Applications for a permit shall include, where applicable, an operational plan stating the area involved, lines and grades defining limits of excavation, estimated number of cubic yards of material to be excavated, location where excavated solid waste is to be deposited, the estimated time required for excavation, and a plan for restoring the site.
- (g) **Emergency provisions.** In emergency situations involving solid waste which requires storage, transportation, or disposal on a one-time basis or other special cases where strict adherence to these regulations would result in undue hardships or unnecessary delays, the department can prescribe on a case-by-case basis, the procedures and conditions necessary for the safe and effective management of the wastes. The generator shall not take action in these cases except as immediately necessary for the protection of human health or the environment, until the action is approved by the department. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-6a. Public notice of permit actions, public comment period, and public hearings.

(a) Public notice and comment period.

- (1) Scope and timing. A public notice shall be given by the department when a municipal solid waste landfill permit action has been proposed under K.A.R. 28-29-6 or when a public hearing has been scheduled pursuant to subsection (b) of this regulation.
- (A) Public notice shall be required for a draft permit or any proposed significant modifications to a permit by the department.
 - (B) Public notice shall be required for any public hearing on a permit action.

- (C) A public notice shall not be required when suspension, denial or revocation, or non-significant modification of a permit is proposed by the department.
 - (D) A public notice may describe more than one permit action or hearing.
 - (E) Each public notice shall be published not less than 30 days prior to the hearing or proposed action.
- (2) Procedures.
- (A) Each public notice shall be published in the Kansas register.
 - (B) Where a proposed action or hearing may generate significant local interest, a public notice shall also be published in a newspaper having major circulation in the vicinity of the proposed action or hearing.
- (3) Contents of public notice. Each public notice issued under this regulation shall contain the following information:
- (A) The name and address of the office processing the permit action for which notice is being given;
 - (B) the name and location of the facility for which the permit action is proposed;
 - (C) a map of the facility for which the permit action is proposed;
 - (D) a brief description of the activity to be conducted at the facility for which the permit action is proposed;
 - (E) the name, address, and telephone number of the person from whom interested persons may obtain or review additional information;
 - (F) the time and place of any hearing that will be held; and
 - (G) a brief description of the comment procedures outlined in subsections (b) and (c) of this regulation.
- (b) Public comments.** During the public comment period provided in subsection (a) of this regulation, any interested person may submit written comments. All comments, except those concerning determinations by local government units that the proposed permit action conforms with the official plan, shall become a part of the permit record and shall be considered in making a final decision on the proposed permit action.
- (c) Public hearings.** If the department determines there is sufficient local interest in a proposed permit action, a public hearing may be scheduled. All written and verbal comments received during a public hearing provided in subsection (a) of this regulation shall become a part of the permit record and be considered in making a final decision on the proposed permit action.
- (d) Response to comments.** A response to comments shall be issued at the time any final permit decision is issued. The response shall be available to the public and shall:
- (1) Specify what, if any, changes were made to the proposed action as a result of public comment; and
 - (2) briefly respond to any significant comments received during the public comment period. (Authorized by K.S.A. 65-3406; amended by L. 1993, Ch. 274, Sec. 2; implementing K.S.A. 65-3401; effective March 21, 1994.)

28-29-7. Conditions of permits.

- (a)** When granting a permit, the secretary shall consider and stipulate: the types of solid wastes which may be accepted or disposed, special operating conditions, procedures, and changes necessary to comply with these and other state or federal laws and regulations.
- (b)** When the department determines that a solid waste has or may have value as a recoverable resource, a permit may require or may be modified to require segregation of the materials, processing, separate disposal, and marking to allow future retrieval of the materials.
- (c)** The department may specify conditions or a date upon which each permit will expire. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-8. Modifications of permits.

- (a)** The permittee shall notify the department in writing at least thirty (30) days before any proposed modification of operation or construction from that described in the plan of operation or permit. The permittee shall not proceed with the modification until the department provides written approval.

- (b) The department may at any time modify a permit or any term or condition of a permit to include: special conditions required to comply with the requirements of these regulations; to avoid hazards to public health, or the environment or to abate a public nuisance; or to include modifications proposed by the permittee and approved by the department. Permits may be modified when:
- (1) The permittee is not able to comply with the terms or conditions of the permit due to an act of God, a strike against someone other than the permittee, material shortage, or other conditions over which the permittee has little or no control; or
 - (2) New technology that can provide significantly better protection for health and environmental resources of the state becomes available.
- (c) The permittee shall take prompt action to comply with the new special conditions, or within fifteen (15) days of receipt of notification of the new special conditions, request a hearing before the secretary in accordance with K.S.A. 65-3412. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-9. Suspension of permits.

- (a) A permit shall be suspended by the department when in the opinion of the secretary this action is necessary to protect the public health or welfare, or the environment. The secretary shall notify the permittee of the suspension and the effective date. At the time of giving this notice, the secretary shall identify items of noncompliance with the requirements of these regulations or with conditions of the permit and shall specify deficiencies which the permittee shall correct, actions which the permittee shall perform, and the date or dates by which the permittee shall submit a plan detailing corrective action taken or to be taken in order to achieve compliance.
- (b) The suspension shall remain in effect until the deficiencies are corrected to the satisfaction of the secretary or until the secretary makes a final determination based on the outcome of a hearing requested by the permittee under the provisions of K.S.A. 65-3412 or amendments of that statute. The determination may result in termination of the suspension, continuation of the suspension, or modification or revocation of the permit.
- (c) Permits shall be suspended for failure to pay the permit fee required by K.S.A. 65-3407 or amendments of that statute. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 6503406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-10. Denial or revocation of permits.

- (a) A permit may be denied or revoked for any of the following reasons:
- (1) Misrepresentation or omission of a significant fact by the permittee either in the application for the permit or in information subsequently reported to the department;
 - (2) Improper functioning or operation of processing facility or the disposal area that causes pollution or degradation of the environment or the creation of a public health hazard or a nuisance;
 - (3) Violation of any provision of K.S.A. 65-3401 *et seq.* or these rules and regulations or other restrictions set forth in the permit or in a variance;
 - (4) Failure to comply with the official plan; or
 - (5) Failure to comply with an order or a modification to a permit issued by the secretary.
- (b) Any person aggrieved by the denial or revocation of a permit may request a hearing under the provision of K.S.A. 65-3412 or amendments of that statute. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-11. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-12. Notification of closure, closure plans, and long term care.

(a) **Notification of closure.** All permittees shall notify the department in writing at least 60 days before closure.

(b) **Closure plans.** Persons desiring to obtain a permit shall file a site closure plan at the time a permit application is submitted. The closure plan shall delineate the finished construction of the processing facility or disposal area after closure. Closure plans for disposal areas shall also provide for long term care when wastes are to remain at the area after closure. The plan shall be updated at the time of permit renewal or at the time notice of modification is submitted in accordance with K.A.R. 28-29-8(a), or at the time the notice of closure is submitted.

(c) If wastes are to remain at the disposal area after closure, the closure plan may be required by the department to be prepared by a professional engineer licensed to practice in Kansas. Upon completion of all the procedures provided for in the closure plan, the engineer shall certify that the disposal area was closed in accordance with the plan.

(d) **Closure plan contents.** The closure plan shall include the following when determined applicable by the secretary:

(1) Plans for the final contours, type and depth of cover material, landscaping, and access control;

(2) final surface water drainage patterns and runoff retention basins;

(3) plans for the construction of liners, leachate collection and treatment systems, gas migration barriers or other gas controls;

(4) cross sections of the site that delineate the disposal or storage locations of wastes. The cross sections shall depict liners, leachate collection systems, the waste cover, and other applicable details;

(5) plans for the post-closure operation and maintenance of liners, leachate and gas collection and treatment systems, cover material, runoff retention basins, landscaping, and access control;

(6) removal of all solid wastes from processing facilities;

(7) plans for monitoring and surveillance activities after closure;

(8) recording of a detailed site description, including a plot plan, with the department. The plot plan shall include the summaries of the logs or ledgers of waste in each cell, depth of fill in each cell and existing conditions;

(9) a financial plan for utilization of the surety bond or cash bond required by K.S.A. 65-3407; and

(10) an estimate of the annual post closure and maintenance costs.

(e) **Long-term care.** The owner of a solid waste disposal area, where the wastes are not removed as a part of the closure plan, shall provide long-term care for a period of at least 30 years following approval by the department of completion of the procedures specified in the closure plan. At the time of application for, or at the time of closure of, a solid waste disposal area permit, additional periods of long-term care may be specified by the secretary as the secretary deems necessary to protect public health or welfare, or the environment. (Authorized by K.S.A. 1996 Supp. 65-3406; as amended by L. 1997, Ch.139, Sec. 1; implementing K.S.A. 1996 Supp. 65-3406, as amended by L. 1997, Ch. 139, Sec. 1, and 65-3407, as amended by L. 1997, Ch. 140, Sec. 4; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended July 10, 1998.)

28-29-13. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-14. (Authorized by K.S.A. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-15. (Authorized by K.S.A. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-16. Inspections.

(a) The secretary or any duly authorized representative of the secretary, at any reasonable hour of the day, having identified themselves and giving notice of their purpose, may:

- (1) Enter a factory, plant, construction site, solid waste disposal area, solid waste processing facility, or any environment where solid wastes are generated, stored, handled, processed, or disposed, and inspect the premises and gather information of existing conditions and procedures;
 - (2) Obtain samples of solid waste from any person or from the property of any person, including samples from any vehicle in which solid wastes are being transported;
 - (3) Drill test wells on the affected property of any person holding a permit or liable for a permit under K.S.A. 65-3407 or amendments of that statute and obtain samples from the wells;
 - (4) Conduct tests, analyses, and evaluations of solid waste to determine whether the requirements of these regulations are otherwise applicable to, or violated by, the situation observed during the inspection;
 - (5) Obtain samples of any containers or labels; and
 - (6) Inspect and copy any records, reports, information, or test results relating to wastes generated, stored, transported, processed, or disposed.
- (b)** If during the inspection, unidentified or unpermitted waste storage or handling procedures are discovered, the department's representative may instruct the operator of the facility to retain and properly store solid or hazardous wastes, pertinent records, samples, and other items. These materials shall be retained by the operator until the identification and handling of the waste is approved by the department.
- (c)** When obtaining samples, the department's representative shall allow the facility operator to collect duplicate samples for separate analysis. Analytical data that might reveal trade secrets shall be treated as confidential by the department, when requested by the owner. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-17. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-17a. This regulation shall be revoked on and after February 24, 2000. (Authorized by K.S.A. 1983 Supp. 65-3406; implementing K.S.A. 1983 Supp. 65-3406, 65-3407; effective, E-82-8, April 10, 1981; effective May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked Feb. 24, 2000.)

28-29-17b. This regulation shall be revoked on and after February 24, 2000. (Authorized by K.S.A. 1983 Supp. 65-3406; implementing K.S.A. 1983 Supp. 65-3406, 65-3407; effective May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked Feb. 24, 2000.)

28-29-18. (Authorized by K.S.A. 1983 Supp. 65-3406; implementing K.S.A. 1983 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked March 22, 2002.)

28-29-19. Monitoring required. As a condition for issuing a permit, the secretary may require the approval, installation, and operation of environmental quality monitoring systems before the acceptance of solid wastes for storage, processing, or disposal. Approval of the monitoring system(s) will be based on the following:

- (a)** The location of monitoring wells, air monitoring stations, and other required sampling points;
- (b)** Plans and specifications for the construction of the monitoring systems;
- (c)** Frequency of sampling; and
- (d)** Analyses to be performed. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-20. Restrictive covenants and easements.

- (a) Permitted solid waste disposal areas.** Each owner of a solid waste disposal area that is required to have a permit and where wastes will remain at the solid waste disposal area after closure may be required by the

secretary to execute a restrictive covenant or easement, or both. The restrictive covenant with the register of deeds' stamp or the easement, or both, shall be submitted to the department before the permit is issued.

- (b) Solid waste disposal areas without a permit.** Each owner of a solid waste disposal area approved by the secretary under K.S.A. 65-3407c, and amendments thereto, may be required by the secretary to execute a restrictive covenant.
- (c) Restrictive covenant.** If required, the owner shall execute and file with the county register of deeds a restrictive covenant to run with the land that fulfills the following requirements:
- (1) Covers all areas that have been or will be used for waste disposal;
 - (2) specifies the location of the solid waste disposal area. Acceptable methods to determine the location shall include the following:
 - (A) Obtaining a legal description by measuring from the property boundaries;
 - (B) obtaining a legal description by measuring from a permanent survey marker or benchmark; and
 - (C) obtaining the latitude and longitude, accurate to within five meters, using a global positioning system;
 - (3) specifies the uses that may be made of the solid waste disposal area after closure;
 - (4) requires that use of the property after closure be conducted in a manner that preserves the integrity of waste containment systems designed, installed, and used during operation of the solid waste disposal areas, or installed or used during the postclosure maintenance period;
 - (5) requires the owner or tenant to preserve and protect all permanent survey markers and benchmarks installed at the solid waste disposal area;
 - (6) requires the owner or tenant to preserve and protect all environmental monitoring stations installed at the solid waste disposal area;
 - (7) requires subsequent property owners or tenants to consult with the department during planning of any improvement to the site and to receive approval from the department before commencing any of the following:
 - (A) Excavation or construction of permanent structures;
 - (B) construction of drainage ditches;
 - (C) alteration of contours;
 - (D) removal of waste materials stored on the site;
 - (E) changes in vegetation grown on areas used for waste disposal;
 - (F) production, use, or sale of food chain crops grown on land used for waste disposal; or
 - (G) removal of security fencing, signs, or other devices installed or used to restrict public access to waste storage or solid waste disposal areas; and
 - (8) provides terms whereby modifications to the restrictive covenant or other land uses may be initiated or proposed by property owners.
- (d) Easement.** If required, the owner shall execute an easement allowing the secretary, or the secretary's designee, to enter the premises to perform any of the following:
- (1) Complete items of work specified in the site closure plan;
 - (2) perform any item of work necessary to maintain or monitor the area during the postclosure period; or
 - (3) sample, repair, or reconstruct environmental monitoring stations constructed as part of the site operating or postclosure requirements.
- (e) Conveyance of easement, title, or other interest to real estate.** Each offer or contract for the conveyance of easement, title, or other interest to real estate used for the long-term storage or disposal of solid waste shall contain a complete disclosure of all terms, conditions, and provisions for long-term care and subsequent land uses that are imposed by these solid waste regulations or the solid waste disposal area permit. The conveyance of title, easement, or other interest in the property shall not be consummated without adequate and complete provisions for the continued maintenance of waste containment and monitoring systems.
- (f) Permanence.** All covenants, easements, and other documents related to this regulation shall be permanent, unless extinguished by agreement between the property owner and the secretary.
- (g) Fees.** All document-recording fees shall be paid by the property owner.

(h) Federal government applicants and owners.

- (1) For federal government applicants and owners, the term “restrictive covenant” shall be replaced with “notice of restrictions” throughout this regulation.
- (2) The restrictions shall be recorded in the base master plans or similar documents.
- (3) If property that is owned by the federal government and that has a notice of restrictions filed according to this regulation is transferred to an entity other than the federal government, at the time of transfer the owner shall file a restrictive covenant that meets the requirements of this regulation. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended May 30, 2003.)

28-29-20a. Laboratory certification. All monitoring analyses required under K.A.R. 28-29-19, and amendments to it, shall be conducted by a laboratory certified or approved by the department to perform these analyses. Laboratories desiring to be certified to perform these analyses shall comply with all conditions, procedures, standards, and fee requirements specified in K.A.R. 28-15-35 and 28-15-37, and amendments to them. (Authorized by and implementing K.S.A. 1981 Supp 65-3406; effective, E-82-8, April 10, 1981; effective May 1, 1982.)

STANDARDS FOR MANAGEMENT OF SOLID WASTES/COMPOSTING

28-29-21. Storage of solid wastes.

(a) General. The owner or occupant or both of any premise, business establishment, or industrial plant shall provide sanitary storage for all solid waste not classified as hazardous wastes produced on his or her property which meets standards set forth in these regulations and the official plan for the area. All solid waste shall be stored so that it: does not attract disease vectors; does not provide shelter or a breeding place for disease vectors; does not create a health or safety hazard; is not unsightly; and the production of offensive odors is minimized. Each premise shall be provided with a sufficient number of acceptable containers to accommodate all solid waste materials other than bulky wastes that accumulate on the premises between scheduled removals of these materials. On premises where the quantity of solid wastes generated is sufficient to make the use of individual storage containers impractical, bulk containers may be used for storage of refuse. The bulk container may be equipped with compaction equipment and shall be a size, design, and capacity compatible with the collection equipment. Containers shall be constructed of durable metal or plastic material, be easily cleaned, and be equipped with tight-fitting lids or doors that can be easily closed and opened.

(b) Specific storage standards.

- (1) Garbage and putrescible wastes shall be stored in:
 - (A) Rigid containers that are durable, rust resistant, nonabsorbent, water tight, and rodent proof. The container shall be easily cleaned, fixed with close-fitting lids, fly-tight covers, and provided with suitable handles or bails to facilitate handling;
 - (B) Rigid containers equipped with disposable liners made of reinforced kraft paper or polyethylene or other similar material designed for storage of garbage;
 - (C) Nonrigid disposable bags designed for storage of garbage. The bag shall be provided with a wallhung or free standing holder which supports and seals the bag; prevents insects, rodents, and animals from access to the contents; and prevents rain and snow from falling into the bag; or
 - (D) Other types of containers meeting the requirements of 16 Code of Federal Regulations Chapter II Subchapter B, part 1301 in effect June 13, 1977, and paragraph (a) of this regulation and that are acceptable to the collection agency.
- (2) Mixed refuse. When putrescible wastes and nonputrescible refuse are stored together, the container shall meet the standards and requirements of paragraph (b)(1) of this regulation.
- (3) Nonputrescible bulky wastes. The wastes shall be stored temporarily in any manner that does not create a health hazard, fire hazard, rodent harborage, or permit any unsightly conditions to develop, and is in accordance with any locally adopted regulations. (Authorized by and implementing K.S.A. 1981 Supp.

65-3406; effective Jan 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-22. Standards for collection and transportation of solid wastes.

- (a) **Frequency of collection.** Solid waste, excluding bulky wastes, shall be removed from the storage containers on residential premises and places of public gathering in accordance with these regulations at least once each week. Garbage and putrescible materials shall be removed from commercial or industrial properties as often as necessary to prevent nuisance conditions but at least once a week. Trash and other combustible materials, free of putrescible material, shall be removed from commercial and industrial properties as often as is necessary to prevent overfilling of the storage facilities or the creation of fire hazards. Bulky wastes, free of putrescible wastes, shall be removed from properties as often as necessary to prevent nuisance conditions from occurring.
- (b) **Collection equipment.** All vehicles and equipment used for collection and transportation of solid waste shall be designed, constructed, maintained, and operated in a manner that will prevent the escape of any solid, semi-liquid, or liquid wastes from the vehicle or container. Collection vehicles shall be maintained and serviced periodically, and should receive periodic safety checks. Safety defects in a vehicle shall be repaired before the vehicle is used.
- (c) Solid waste shall not be stored after collection in a collection vehicle for more than 12 hours unless the vehicle is parked in an area in which the land use is predominately industrial or light industrial. Solid wastes shall not be stored overnight in a collection vehicle parked in an area in which the land use is predominantly residential.
- (d) Solid wastes shall not be unloaded from any collection vehicle unless the collection vehicle is a satellite vehicle unloading into a larger vehicle or the unloading point is a permitted processing facility, transfer station or disposal area, except the unloading may be done to facilitate repairs, to extinguish a fire, or for other emergency. When a vehicle is unloaded due to a emergency situation solid waste shall be reloaded and removed promptly, after the emergency no longer exists.
- (e) The person operating the collection system shall provide for prompt cleanup of all spillages caused by the collection operation.
- (f) The person operating the collection system shall provide for prompt collection of any waste materials lost from the collection vehicles along the route to a disposal area or processing facility. (authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-23. Standards for solid waste processing facilities and disposal areas. All solid waste disposal areas and solid waste processing facilities shall be located, designed, operated and maintained in conformity with the following standards:

- (a) **Acceptable methods of disposal.** Nonhazardous solid wastes, industrial solid wastes, and residues from solid waste processing facilities shall be disposed of in a sanitary landfill. Nonputrescible rubble and demolition waste material such as brick, mortar, broken concrete, and similar materials produced in connection with the construction or demolition of buildings or other structures, may be disposed of at a construction and demolition landfill.
- (b) **Acceptable methods for processing.** Combustible solid wastes may be burned in incinerators that conform with the provisions of the air quality control act, K.S.A. 65-3001 *et seq.* and the regulations adopted under those statutes. Solid wastes may be shredded, separated, and consolidated at shredding, separation, and transfer stations for which a permit has been issued by the secretary. Animal manures, sludges, and solid wastes with high organic content may be processed into compost at an approved composting plant for which a permit has been issued by the secretary.
- (c) **Planning and design.** Planning, design, and operation of any solid waste processing facility or disposal area, including, but not limited to, sanitary landfills, incinerators, compost plants, transfer stations, and other solid waste disposal areas or processing facilities, shall conform with appropriate design and operation standards of the department.

- (d) Location.** Location of all solid waste disposal areas and solid waste processing facilities shall conform to applicable state laws, and county or city zoning regulations and ordinances. All locations for solid waste disposal areas and processing facilities shall be reviewed and approved by the department before any site development is started. Solid waste disposal areas or processing facilities shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species or cause or contribute to the taking of any endangered or threatened species as defined by K.S.A. 35-501 *et seq.* and K.A.R. 23-17-2. Sites disposing of putrescible wastes shall not be located in areas where the attraction of birds can cause a significant bird hazard to low flying aircraft. A minimum separation of twenty-five (25) feet shall be maintained between a disposal operation and any pipeline, underground utility, or electrical transmission line easement. Sanitary landfills shall not be located within the one hundred (100) year frequency floodplain unless protected by flood control levees and other appurtenances designed to prevent washout of solid waste from the site.
- (e) Access roads.** Access roads to the disposal area or processing facility shall be of all-weather construction and negotiable at all times by trucks and other vehicles. Load limits on bridges and access roads shall be sufficient to support all traffic loads which will be generated by use of the area or facility.
- (f) Reports required.** Operators of all solid waste disposal areas and processing facilities shall maintain suitable records of volumes or tonnage of solid wastes received, land area used, population served, area served, and any other information required by the conditions of the permit. All information shall be summarized and reported to the department on forms furnished by the department.
- (g) Air quality.** The operator of every solid waste disposal area or solid waste processing facility shall conform to all applicable provisions of K.S.A. 65-3001 *et seq.*, any regulations adopted under those statutes, and any local regulations pertaining to air quality.
- (h) Communication.** Two-way communications shall be available to all solid waste processing facilities or disposal areas.
- (i) Fire protection.** Arrangements shall be made for fire protection services when a fire protection district or other public fire protection service is available. When this service is not available, practical alternate arrangements shall be provided at all sites. In case of accidental fires at the site, the operator shall be responsible for initiating and continuing appropriate fire fighting methods until all smoldering, smoking, and burning ceases. All disruption of finished grades, or covered or completed surfaces, shall be covered and regraded upon completion of fire fighting activities.
- (j) Limited access.** Access to a solid waste disposal area or processing facility shall be limited to hours when an attendant or operating personnel are at the site. A gate or barrier and fencing approved by the department shall be erected to prevent access to the solid waste disposal area or processing facility during hours when the area or facility is closed. Access by unauthorized vehicles or pedestrians shall be prohibited.
- (k) Hours of operation.** Hours of operation and other limitations shall be prominently posted at the entrance of the disposal area or facility.
- (l) Salvage.** Salvage or reclamation of materials shall be permitted only when facilities specifically designed for salvaging or processing solid wastes are provided, and when the salvage materials are controlled to prevent interference with prompt, sanitary disposal of solid wastes. All salvage operations shall be conducted in a manner that will not create a nuisance.
- (m) Safety.** An operational safety program approved by the department shall be provided for employees at solid waste processing facilities and disposal areas.
- (n) Disease vector control.** Solid waste processing facilities and disposal areas shall be operated in a manner which will prevent the harborage or breeding of insects or rodents. Whenever supplemental disease vector control measures are necessary, these measures shall be promptly carried out.
- (o) Aesthetics.** Odors and particulates, including dust and litter, shall be controlled by daily application of cover material, sight screening or other means to prevent damage or nuisance. Construction and demolition landfills or other solid waste disposal areas receiving only nonputrescible waste materials may apply cover material at a less frequent rate if approved by the department.
- (p) Gas control.** The concentration of explosive gasses generated by the decomposition of solid waste disposed of on the site shall not exceed 25 percent of the lower explosive limit in on site structures (excluding gas

control or recovery system components) or at facility property line. As used in this section "lower explosive limit" means the lowest percent by volume of a mixture of methane which will propagate a flame in air at 25°C and atmospheric pressure. Toxic or asphyxiating gases in concentrations harmful to humans, animals, or plant life shall not be allowed to migrate off site or accumulate in facility structures.

- (q) **Water pollution.** Solid waste processing facilities and disposal areas, which include a point source of discharge of pollutants or solid wastes to off-site surface waters, shall comply with terms of a permit issued under K.S.A. 65-164 *et seq.* Facilities shall be designed to prevent nonpoint source pollution discharges violating applicable legal requirements implementing the Kansas statewide water quality management plan in effect on November 1, 1981 approved under section 208 of Public Law 92-500 (the Clean Water Act) as amended. Solid waste disposal areas and processing facilities shall be designed and operated so as to prevent a discharge of dredge or fill material that is in violation of section 404 of PL 92-500 (the clean water act), as in effect on November 1, 1981. Solid wastes shall not be placed in unconfined waters which are subject to free movement on the surface, in the ground or within a larger body of water. If ground water which passes beneath a disposal facility is currently used as a public drinking water supply or is designated by the state of Kansas for future use as a drinking water supply, the naturally occurring ground water quality beyond the disposal site property boundary shall not be degraded. If ground water which passes beneath a disposal area or processing facility is currently used or designated by the state for purposes other than as a drinking water supply, the ground water beyond the disposal area property boundary shall be maintained at a quality as specified in the disposal area permit.
- (r) **Maps required.** The operator shall maintain a log of commercial or industrial solid wastes received including sludges, liquids, or barreled wastes. The log shall indicate the source and quantity of waste and the disposal location. The areas used for disposal of these wastes and other large quantities of bulk wastes shall be clearly shown on a map and referenced to the boundaries of the tract or other permanent markings.
- (s) **Disposal of sewage and industrial liquids or sludges.** Sewage or industrial solid waste liquids or sludges shall not be disposed in a sanitary landfill designed for the disposal of mixed refuse until the department has been notified and specific arrangements for handling the wastes have been approved by the department.
- (t) **Disposal of hazardous waste.** Hazardous waste shall not be disposed of in a sanitary landfill. For the purposes of this subsection, "hazardous waste" means any waste determined by the secretary, under section 1 of chapter 251 of the 1981 session laws of Kansas, to be a hazardous waste and listed by the secretary as a hazardous waste in ~~K.A.R. 28-31-3~~ K.A. R. 28-31-261. [*Note: modified by 28-29-1a*]
- (u) The provisions of 40 Code of Federal Regulations Part 257.3-5 (application to land used for food chain crops), as in effect on September 23, 1981, and part 257.3-6 (disease), as in effect on September 23, 1981, are incorporated by reference. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-23a. Standards for solid waste transfer stations.

(a) **Applicability.** Each solid waste transfer station shall be subject to the requirements of this regulation.

(b) **Design requirements.**

- (1) Each solid waste transfer station processing, tipping, sorting, storage and compaction area shall be subject to the following design requirements, unless an alternate design is approved by the director.
 - (A) Each processing, tipping, sorting, storage and compaction area shall be located in an enclosed building or covered area.
 - (B) Each unloading area shall be of adequate size and design to allow for:
 - (i) efficient unloading from collection vehicles; and
 - (ii) unobstructed movement of vehicles.
 - (C) Each unloading and loading area shall be constructed of concrete or asphalt paving material.
 - (D) Each solid waste transfer station shall have sufficient capacity to store two days worth of solid waste in the event of an interruption in transportation or disposal service. The capacity of any trailer parked within the boundaries of the permitted site may be included as a part of the two day capacity.
 - (E) Each solid waste transfer station shall be large enough to segregate special wastes, including medical waste and asbestos, if special wastes will be managed at the transfer station.

- (2) Each solid waste transfer station structure shall be subject to the following design requirements, unless an alternate design is approved by the director.
 - (A) Each enclosed structure shall be equipped with an exhaust system capable of removing accumulations of noxious or flammable gases.
 - (B) Each structure shall be constructed of materials that will not absorb odors or liquids from the waste.
 - (C) Each structure shall have a main doorway and roof of sufficient height to allow trucks that will routinely utilize the transfer station to unload.
- (3) Each solid waste transfer station access road shall be subject to the following requirements.
 - (A) Each access road shall be designed to accommodate expected traffic flow in a safe and efficient manner.
 - (B) Each access road shall be constructed with a road base that is capable of withstanding expected loads.
 - (C) Each on-site road shall be passable by loaded collection and transfer vehicles in all weather conditions.
- (4) Each solid waste transfer station shall be subject to the following general requirements.
 - (A) The design of each transfer stations shall minimize wind-blown litter.
 - (B) Control of stormwater shall be provided.
 - (C) Weighing or measuring capabilities shall be provided for all solid waste processed at the facility.
 - (D) Each owner or operator of a solid waste transfer station shall evaluate the feasibility of constructing an area at the transfer station site so that the following activities could be conducted:
 - (i) storage of white goods;
 - (ii) separation of materials for recycling;
 - (iii) separation of materials for composting; or
 - (iv) other solid waste management activities.
 - (E) Water shall be provided in sufficient quantity and pressure to wash down the unloading, loading, and storage areas of the transfer station.
 - (F) Collection of washdown water and stormwater contacting solid waste shall be provided.
 - (G) The following amenities shall be provided for transfer station workers:
 - (i) sanitary facilities;
 - (ii) drinking water; and
 - (iii) handwashing water.
- (c) Operating requirements.** Each solid waste transfer station owner or operator shall comply with the following operating requirements.
 - (1) Wastes accepted at the solid waste transfer station shall consist of residential waste and commercial waste.
 - (2) The following wastes shall not be accepted at any solid waste transfer station unless handling plans have been specifically approved by the department:
 - (A) medical waste;
 - (B) asbestos waste; or
 - (C) other special wastes.
 - (3) Any solid waste passing through a solid waste transfer station shall be ultimately treated or disposed of at:
 - (A) a solid waste management facility authorized by the department if the facility is located in Kansas; or
 - (B) a solid waste management facility authorized by the appropriate governmental agency if the facility is located in another state.
 - (4) Each access point to a solid waste transfer station shall have a sign posted that states:
 - (A) the hours of operation of the transfer station;
 - (B) the types of solid waste that shall be accepted at the transfer station;
 - (C) the types of wastes that shall not be accepted at the transfer station;
 - (D) the name, address and telephone number of the transfer station owner and operator; and

- (E) the telephone number of an emergency contact person available during non-operating hours.
- (5) Each time the solid waste transfer station is open, an attendant shall be on duty.
 - (6) Provisions shall be made to prevent vehicles from backing into the receiving pits while unloading.
 - (7) Access to the facility by unauthorized persons shall be limited each time the station is closed.
 - (8) Procedures for preventing unauthorized receipt of regulated hazardous wastes as defined pursuant to ~~K.A.R. 28-31-3~~ and ~~K.A.R. 28-29-4~~ K.A.R. 28-31-261 [Note: modified by 28-29-1a], polychlorinated biphenyl (PCB) wastes as defined in 40 CFR part 761 as in effect July 1, 1992, or other wastes not addressed in the transfer station operating plan shall be developed and implemented.
 - (9) Blowing litter at the solid waste transfer station shall be controlled.
 - (10) Vectors at the solid waste transfer station shall be controlled.
 - (11) Each solid waste transfer station shall be cleaned as necessary to:
 - (A) minimize odors;
 - (B) minimize vectors; and
 - (C) provide a safe working environment.
 - (12) All drainage from wet cleaning of any solid waste transfer station shall be:
 - (A) discharged to a sanitary sewer; or
 - (B) managed by another method approved by the director.
 - (13) Each day that waste is received at any solid waste transfer station, the transfer station shall be cleaned by an appropriate method to minimize odors and nuisance conditions.
 - (14) All on-site roads at a solid waste transfer station site shall be maintained to minimize dust.
 - (15) Any solid waste received at a solid waste transfer station shall be loaded into a transfer vehicle by the next day of operation at the transfer station.
 - (16) Each transfer vehicle shall be removed from the transfer station site within 48 hours after being filled to capacity. Each transfer vehicle not filled to capacity in any seven day period shall be removed from the transfer station site before the end of the seven day period, unless weather, or other abnormal conditions prevent transportation of the transfer vehicle.
 - (17) Each solid waste transfer station shall be equipped with fire protection equipment that is:
 - (A) available at all times; and
 - (B) capable of extinguishing fire resulting from:
 - (i) hot ashes;
 - (ii) oxidizers; or
 - (iii) other fire sources.
 - (18) An on-site operating record shall be maintained by the transfer station owner or operator. Each record shall be maintained for a minimum of three years. The operating record shall contain the following information:
 - (A) a daily log of the quantity of solid waste received;
 - (B) a daily log of the quantity of solid waste transported;
 - (C) a daily log of the destination of the solid waste transported;
 - (D) a daily log of any special waste received;
 - (E) a daily log of any special waste transported;
 - (F) a copy of each special waste disposal authorization written to the transfer station owner or operator;
 - (G) a copy of transfer station employee training records; and
 - (H) a copy of the current facility permit, including the following:
 - (i) all facility design plans; and
 - (ii) the facility operating plan.
 - (19) Each owner or operator shall prepare and submit an annual report to the department by March 1 of each year. The report shall contain:
 - (A) the weight or volume of solid waste received;
 - (B) the destination of the solid waste transferred;
 - (C) the weight or volume of each type of material recovered at the transfer station; and
 - (D) any changes in the operation that have occurred in the previous year.

- (20) Each owner or operator shall develop a contingency plan for the solid waste transfer station. The contingency plan shall:
- (A) specify any procedures that shall be initiated if the solid waste transfer station experiences:
 - (i) an equipment breakdown;
 - (ii) a fire;
 - (iii) a receipt of hazardous material;
 - (iv) a release of a regulated quantity of any waste; or
 - (v) any other incident that may cause an emergency or suspend operations at the transfer station;and
 - (B) be available at any time at the transfer station.

(21) Employee training.

- (A) The owner or operator of each solid waste transfer station shall provide training to each transfer station employee on the contents of the contingency plan identified in paragraph (c)(20) of this regulation, and the facility operating plan.
- (B) A record of employee training required in paragraph (c)(21)(A) of this regulation shall be maintained in the operating record identified in paragraph (c)(18) of this regulation. (Authorized by K.S.A. 1993 Supp.; 65-3406, implementing K.S.A. 65-3401; effective Feb. 20, 1995.)

28-29-24. Construction and demolition landfills.

- (a) A permit to construct or operate a construction and demolition landfill shall not be required for a construction and demolition landfill operated on the same tract as, and in conjunction with, a permitted sanitary landfill.
- (b) If a city or a county, by ordinance or resolution, has established standards equivalent to, or more stringent than, those of the department to control construction and demolition landfills, and demonstrates that it has an enforcing agency to ensure those standards are adhered to, the department will issue a permit to the person operating the site upon certification by the enforcement division of the city or county to the department that those standards will be followed. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-25. Standards for solid waste processing facilities.

- (a) **Incinerators.** All incinerators used for combustion of solid wastes shall be designed and operated in conformity with K.S.A. 65-3001 et seq. and rules and regulations adopted under those statutes. All emission control devices, disposal of incinerator residues, and treatment of wastewater shall be approved by the department.
- (b) Other methods of solid waste handling, processing, and disposal. Before any disposal area or processing facility, or any method of solid waste handling, processing, or disposal, not provided for in these regulations, is practiced or placed into operation, complete plans, specifications, design data, land-use plans, and proposed operation procedures shall be submitted to the department for review and permit issuance in accordance with K.A.R. 28-29-6. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-25a. Small yard waste composting sites. This regulation shall apply to each yard waste composting site that has a composting area of one-half acre or less, but this regulation shall not apply to backyard composting. Hay, straw, and manure may be added to yard waste only for the purpose of adjusting the carbon-to-nitrogen ratio of the compost mix. The additives shall not exceed 10 percent by volume of the total mixture without the written approval of the department. Other materials may be added to the yard waste only with the written approval of the department.

- (a) **Site design.** The owner or operator of each yard waste composting site shall design and construct the composting site to meet all of the following requirements.
 - (1) Composting surface and drainage.

- (A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.
- (B) The operation shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.
- (2) Site access.
 - (A) At each site that composts yard waste that is brought in from off-site, the following information shall be posted on one or more signs:
 - (i) Site name;
 - (ii) site hours;
 - (iii) a list of the materials appropriate for composting; and
 - (iv) the name and telephone number of an emergency contact person.
 - (B) Unauthorized dumping shall be discouraged by access control.
- (b) Site operations.** The owner or operator of each yard waste composting site shall perform the following:
 - (1) Minimize odors;
 - (2) control disease vectors, dust, litter, and noise; and
 - (3) remove all finished compost within 18 months of the completion of the composting process.
- (c) Site closure.** The owner or operator of each yard waste composting site shall perform the following:
 - (1) Notify the department, in writing, at least 60 days before closure; and
 - (2) remove all materials from the site within six months of the last receipt of compostable material.
- (d) Registration.** Each owner or operator of a small yard waste composting site shall submit registration information to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department. (Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective October 1, 1999.)

28-29-25b. Yard waste composting facilities . This regulation shall apply to each facility that composts yard waste and has a composting area larger than one-half acre. Hay, straw, and manure may be added to yard waste only for the purpose of adjusting the carbon-to-nitrogen ratio of the compost mix. The additives shall not exceed 10 percent by volume of the total mixture without the written approval of the department. Other materials may be added to the yard waste only with the written approval of the department.

- (a) Facility design.** The owner or operator of each yard waste composting facility shall design and construct the facility to meet the following requirements.
 - (1) Composting surface and drainage.
 - (A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.
 - (B) The facility shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.
 - (C) The composting area shall be graded to prevent ponding of liquids.
 - (D) The surface of the composting area shall be capable of supporting all equipment used.
 - (2) Facility access.
 - (A) At each facility that composts yard waste that is brought in from off-site, the following information shall be posted on one or more signs:
 - (i) Facility name;
 - (ii) permit number;
 - (iii) site hours;
 - (iv) traffic flow;
 - (v) a list of the materials appropriate for composting; and
 - (vi) the name and telephone number of an emergency contact person.
 - (B) Unauthorized dumping shall be discouraged by access control.
 - (C) Facility roads shall be constructed to allow access for managing the composting operation. Yard waste composting facilities shall be exempt from the all-weather access road requirement prescribed in K.A.R. 28-29-23 (e).

- (3) Capacity and storage. The composting facility shall have the capacity to store the following materials:
- (A) Incoming materials waiting to be processed;
 - (B) the materials being processed; and
 - (C) the finished compost, not to exceed 18 months' production.
- (b) Facility operations.** The owner or operator of each yard waste composting facility shall be exempt from K.A.R. 28-29-23 (j) and shall perform the following:
- (1) Minimize odors;
 - (2) control disease vectors, dust, litter, and noise;
 - (3) segregate incoming waste from finished compost;
 - (4) inform the public of disposal sites for waste not acceptable for composting at the facility;
 - (5) begin processing incoming waste within one week of receipt; and
 - (6) remove all finished compost within 18 months of the completion of the composting process.
- (c) Facility closure.** The owner or operator of each yard waste composting facility shall perform the following:
- (1) Notify the department, in writing, at least 60 days before closure; and
 - (2) remove all materials from the facility within six months of the last receipt of compostable material.
- (d) Permit applications.** The owner or operator of each yard waste composting facility shall submit a permit application to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department. The applicant shall include the following items with the permit application.
- (1) Facility design plan. This design plan shall not be required to bear the seal and signature of a professional engineer. The facility design plan shall contain all of the following items:
 - (A) A 7.5 minute topographic map of the area, as typically available from the U.S. geological survey, indicating the facility boundary and the property boundary;
 - (B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;
 - (C) a 100-year floodplain map of the area, as typically available from the federal emergency management agency; and
 - (D) a detailed drawing of the facility that indicates the location of all of the following features:
 - (i) Roads;
 - (ii) the existing and final grades and contours;
 - (iii) storm water control;
 - (iv) buildings and equipment to be installed;
 - (v) utilities; and
 - (vi) access control.
 - (2) Operations plan. The operations plan shall contain the following information:
 - (A) Job descriptions of persons responsible for operation, control, and maintenance of the facility;
 - (B) the anticipated annual quantity of waste to be received, and the seasonal variations of the quantity of waste to be received;
 - (C) the methods to control traffic and to expedite unloading;
 - (D) the methods for measuring incoming waste;
 - (E) the methods to control the types of waste received;
 - (F) the methods for removing noncompostable wastes from the incoming waste stream, including procedures for storage and disposal of these wastes;
 - (G) the location of disposal sites for noncompostable wastes;
 - (H) the method of composting;
 - (I) a list of equipment to be used;
 - (J) a description of any additives used in the process;
 - (K) a quality assurance and quality control plan that outlines the monitoring, sampling, and analysis plans for testing the compost process and product;
 - (L) the proposed end-use of the compost;
 - (M) the methods to minimize, manage, and monitor odors;

- (N) disease vector, dust, litter, and noise control measures;
 - (O) leachate and storm water control measures; and
 - (P) a fire protection and control plan.
- (3) Closure plan. The closure plan shall not be required to bear the seal and signature of a professional engineer. This plan shall include the following information:
- (A) The steps necessary to close the facility;
 - (B) the final surface contours; and
 - (C) a closure cost estimate based on the third-party cost for removing and disposing of the maximum amount of wastes that may be contained at the facility. (Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective October 1, 1999.)

28-29-25c. Manure composting . For the purposes of this regulation, subsections (a), (b), (c), and (d) shall apply to each facility that composts manure and has a composting area of one-half acre or less. Subsections (a), (b), (c), and (e) of this regulation shall apply to each facility that composts manure and has a composting area larger than one-half acre. On-site storage of manure shall not be considered composting.

(a) Facility design. The owner or operator of each facility that composts manure shall design and construct the facility to meet the following requirements:

- (1) Composting surface and drainage.
 - (A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.
 - (B) The facility shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.
 - (C) Leachate control shall be provided wherever leachate is generated.
 - (D) The composting area shall be graded to prevent ponding of liquids.
 - (E) The surface of the composting area shall be capable of supporting all equipment used.
- (2) Facility access.
 - (A) At each facility that composts manure that is brought in from off-site, the following information shall be posted on one or more signs:
 - (i) Facility name;
 - (ii) permit number;
 - (iii) site hours;
 - (iv) traffic flow;
 - (v) a list of the materials appropriate for composting; and
 - (vi) the name and telephone number of an emergency contact person.
 - (B) Unauthorized dumping shall be discouraged by access control.
 - (C) Facility roads shall be constructed to allow access for managing the composting operation. Manure composting facilities shall be exempt from the all-weather access road requirement prescribed in K.A.R. 28-29-23 (e).
- (3) Capacity and storage. The facility shall have the capacity to store the following materials:
 - (A) Incoming materials waiting to be processed;
 - (B) the materials being processed; and
 - (C) the finished compost, not to exceed 18 months' production.
- (4) Separation distances. For the purposes of this regulation, "animal unit," "habitable structure," and "wildlife refuge" have the same meaning as set forth in K.S.A. 65-171d, and amendments thereto.
 - (A) Each facility that composts livestock manure, other than swine manure, shall meet or exceed the following separation distances from any habitable structure in existence when the facility begins operations:
 - (i) 1,320 feet for facilities composting manure from 300 to 999 animal units; and
 - (ii) 4,000 feet for facilities composting manure from 1,000 or more animal units.

- (B) Each facility that composts swine manure shall meet or exceed the following separation distances from any habitable structure or city, county, state, or federal park in existence when the facility begins operations:
 - (i) 1,320 feet for facilities composting manure from 300 to 999 animal units;
 - (ii) 4,000 feet for facilities composting manure from 1,000 to 3,724 animal units; and
 - (iii) 5,000 feet for facilities composting manure from 3,725 or more animal units.
- (C) Each facility that composts swine manure shall meet or exceed the following separation distances from any wildlife refuge:
 - (i) 10,000 feet for facilities composting manure from 1,000 to 3,724 animal units; and
 - (ii) 16,000 feet for facilities composting manure from 3,725 or more animal units.
- (D) For each manure composting operation located at a confined feeding facility, the separation distances as set forth in K.S.A. 65-171d and amendments thereto shall apply.
- (5) Exceptions to the separation distances.
 - (A) The separation distance requirements of paragraphs (a)(4)(A) and (B) of this regulation shall not apply if the owner or operator obtains written agreement from all owners of habitable structures that are within the separation distance, stating that the owners of the habitable structures are aware of the operation and have no objections to the operation. The written agreement shall be filed in the office of the register of deeds of the county in which the habitable structure is located.
 - (B) The separation distance requirements of paragraph (a)(4)(A) of this regulation may be reduced by the secretary if one of the following conditions applies:
 - (i) No substantial objection from owners of habitable structures within the separation distance is received in response to public notice.
 - (ii) The board of county commissioners of the county where the composting operation is located submits a written request seeking a reduction of the separation distances.
 - (C) The separation distance requirements of paragraphs (4)(B)(i) and (ii) of this regulation may be reduced by the secretary if one of the following conditions applies:
 - (i) No substantial objection is received in response to notice given by certified mail, return response requested, to owners of all habitable structures within the separation distance.
 - (ii) The board of county commissioners of the county where the composting operation is located submits a written request seeking a reduction of separation distances.
 - (iii) The secretary determines that technology exists that meets or exceeds the effect of the required separation distance and the composting operation will be using the technology.
 - (D) The separation distance requirements of paragraph (4)(B)(iii) of this regulation may be reduced by the secretary if one of the following conditions applies:
 - (i) No substantial objection is received in response to notice given by certified mail, return response requested, to owners of all habitable structures within the separation distance.
 - (ii) The secretary determines that technology exists that meets or exceeds the effect of the required separation distance and the composting operation will be using the technology.
 - (E) For each manure composting operation located at a confined feeding facility, exceptions to the separation distances as set forth in K.S.A. 65-171d and amendments thereto shall apply.
- (b) Facility operations.** The owner or operator of each facility that composts manure shall perform the following:
 - (1) Minimize odors;
 - (2) control disease vectors, dust, litter, and noise;
 - (3) segregate incoming waste from finished compost;
 - (4) limit public access to hours when an attendant or any operating personnel are at the facility;
 - (5) begin processing incoming waste by the end of the working day; and
 - (6) remove all finished compost within 18 months of the completion of the composting process.
- (c) Facility closure.** The owner or operator of each facility that composts manure shall perform the following:
 - (1) Notify the department, in writing, at least 60 days before closure; and
 - (2) remove all materials from the facility within six months of the last receipt of compostable material.

- (d) Registration.** Each owner or operator of a facility that composts manure and has a composting area of one-half acre or less shall submit registration information to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department.
- (e) Permit applications.** The owner or operator of each facility that composts manure and has a composting area larger than one-half acre shall submit a permit application to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department. The applicant shall include the following items with the permit application:
- (1) Facility design plan. The facility design plan shall contain all of the following items:
 - (A) A 7.5 minute topographic map of the area, as typically available from the U.S. geological survey indicating the facility boundary and the property boundary;
 - (B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;
 - (C) a 100-year floodplain map of the area, as typically available from the federal emergency management agency; and
 - (D) a detailed drawing of the facility that indicates the location of the following features:
 - (i) Roads;
 - (ii) the existing and final grades and contours;
 - (iii) storm water control;
 - (iv) buildings and equipment to be installed;
 - (v) utilities;
 - (vi) access control; and
 - (vii) all other structures.
 - (2) Operations plan. The operations plan shall contain the following information:
 - (A) Job descriptions of persons responsible for operation, control, and maintenance of the facility;
 - (B) the anticipated annual quantity of waste to be received, and the seasonal variations of the quantity of waste to be received;
 - (C) the sources of waste to be received;
 - (D) the methods to control traffic and to expedite unloading;
 - (E) the methods for measuring incoming waste;
 - (F) the methods to control the types of waste received;
 - (G) the methods for removing noncompostable wastes from the incoming waste stream, including procedures for storage and disposal of these wastes;
 - (H) the location of disposal sites for noncompostable wastes;
 - (I) the method of composting;
 - (J) a list of equipment to be used;
 - (K) a description of additives used in the process;
 - (L) a quality assurance and quality control plan that outlines the monitoring, sampling, and analysis plans for testing the compost process and product;
 - (M) the proposed end use of product;
 - (N) the methods to minimize, manage, and monitor odors;
 - (O) disease vector, dust, litter, and noise control measures;
 - (P) leachate and national pollutant discharge elimination system storm water control measures;
 - (Q) the plans for operations during wind, heavy rain, snow, freezing temperatures, or other inclement weather conditions;
 - (R) a contingency plan for events including equipment failure, power outages, natural disasters, receipt of prohibited materials, or other similar interruptions of normal activities; and
 - (S) a fire protection and control plan.
 - (3) Closure plan. The closure plan shall include the following information:
 - (A) The steps necessary to close the facility;
 - (B) the final surface contours; and

- (C) a closure cost estimate based on the third-party cost of removing and disposing of the maximum amount of wastes that may be contained at the facility. (Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective October 1, 1999.)

28-29-25d. Livestock composting . For the purposes of this regulation, subsections (a), (b), (c), and (d) shall apply to each facility that composts livestock, including chickens and turkeys, and has a composting area of one-half acre or less. Subsections (a), (b), (c), and (e) of this regulation shall apply to each facility that composts livestock, including chickens and turkeys, and has a composting area larger than one-half acre.

- (a) The owner or operator of each facility that composts livestock shall design and construct the facility to meet the following requirements.
 - (1) Composting surface and drainage.
 - (A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.
 - (B) The facility shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.
 - (C) Leachate control shall be provided wherever leachate is generated.
 - (D) The composting area shall be graded to prevent ponding of liquids.
 - (E) The surface of the composting area shall be capable of supporting all equipment used.
 - (F) The facility shall be constructed with either a floor or a roof that meets one of the following requirements:
 - (i) The floor shall be composed of a layer of material that is at least one foot thick and has a hydraulic conductivity no greater than 10^{-7} cm/sec, or the facility shall be designed to provide the same level of protection to the groundwater; or
 - (ii) The receiving, processing, and curing areas shall be covered by a roof, or the facility shall be designed to provide the same level of protection from the weather.
 - (2) Facility access.
 - (A) At each facility that composts livestock that is brought in from off-site, the following information shall be posted on one or more signs:
 - (i) Facility name;
 - (ii) permit number;
 - (iii) site hours;
 - (iv) traffic flow;
 - (v) a list of the materials appropriate for composting; and
 - (vi) the name and telephone number of an emergency contact person.
 - (B) Unauthorized dumping shall be discouraged by access control.
 - (C) Facility roads shall be constructed to allow adequate access for managing the composting operation. Each facility that composts livestock shall be exempt from the all-weather access road requirement prescribed in K.A.R. 28-29-23 (e).
 - (3) Capacity and storage. The facility shall have the capacity to store the following materials:
 - (A) Incoming materials waiting to be processed;
 - (B) the materials being processed; and
 - (C) the finished compost, not to exceed 18 months' production.
 - (4) Separation distances. For the purposes of this regulation, "animal unit," "animal unit capacity," "habitable structure," and "wildlife refuge" have the same meaning as set forth in K.S.A. 65-171d, and amendments thereto.
 - (A) Each facility that composts livestock from one or more confined feeding facilities, other than confined feeding facilities for swine, shall meet or exceed the following separation distances from any habitable structure in existence when the facility begins operations:
 - (i) 1,320 feet for facilities composting livestock from one or more confined feeding facilities with a combined animal unit capacity of 300 to 999; and

- (ii) 4,000 feet for facilities composting livestock from one or more confined feeding facilities with a combined animal unit capacity of 1,000 or more.
 - (B) Each facility that composts livestock from one or more confined feeding facilities for swine shall meet or exceed the following separation distances from any habitable structure or city, county, state, or federal park in existence when the facility begins operations:
 - (i) 1,320 feet for facilities composting swine from one or more confined feeding facilities with a combined animal unit capacity of 300 to 999;
 - (ii) 4,000 feet for facilities composting swine from one or more confined feeding facilities with a combined animal unit capacity of 1,000 to 3,724; and
 - (iii) 5,000 feet for facilities composting swine from one or more confined feeding facilities with a combined animal unit capacity of 3,725 or more.
 - (C) Each facility that composts livestock from one or more confined feeding facilities for swine shall meet or exceed the following separation distances from any wildlife refuge:
 - (i) 10,000 feet for facilities composting swine from one or more confined feeding facilities with a combined animal unit capacity of 1,000 to 3,724; and
 - (ii) 16,000 feet for facilities composting swine from one or more confined feeding facilities with a combined animal unit capacity of 3,725 or more.
 - (D) Exceptions to the separation distances set forth in K.S.A. 65-171d, and amendments thereto, shall apply.
- (b) Facility operations.** The owner or operator of each facility that composts livestock shall perform the following:
- (1) Minimize odors;
 - (2) control disease vectors, dust, litter, and noise;
 - (3) ensure that dead animals are not visible from municipal roads or habitable structures;
 - (4) protect the facility from scavenging by animals;
 - (5) segregate incoming waste from finished compost;
 - (6) begin processing incoming waste by the end of the working day;
 - (7) limit public access to hours when an attendant or any operating personnel are at the facility; and
 - (8) remove all finished compost within 18 months of the completion of the composting process.
- (c) Facility closure.** The owner or operator of each facility that composts livestock shall perform the following:
- (1) Notify the department, in writing, at least 60 days before closure;
 - (2) remove all material from the facility within 10 days of ceasing operation; and
 - (3) clean all containers, equipment, machines, floors, and site surfaces that have been in contact with dead animals or solid waste.
- (d) Registration.** Each owner or operator of a facility that composts livestock and has a composting area of one-half acre or less shall submit registration information to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department.
- (e) Permit applications.** The owner or operator of each facility that composts livestock and has a composting area larger than one-half acre shall submit a permit application to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department. The applicant shall include the following items with the permit application:
- (1) Facility design plan. The facility design plan shall contain the following items:
 - (A) A 7.5 minute topographic map of the area, as typically available from the U.S. geological survey, indicating the facility boundary and the property boundary;
 - (B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;
 - (C) a 100-year floodplain map of the area, as typically available from the federal emergency management agency;
 - (D) plan and profile views of the facility indicating the following features:
 - (i) Roads;

- (ii) the existing and final grades and contours;
 - (iii) storm water control;
 - (iv) buildings and equipment to be installed;
 - (v) utilities;
 - (vi) access control; and
 - (vii) all other structures; and
- (E) information on the permeability of the floor structure.
- (2) Operations plan. The operations plan shall contain the following information:
- (A) Job descriptions of persons responsible for operation, control, and maintenance of the facility;
 - (B) the anticipated annual quantity of waste to be received, and the seasonal variations of the quantity of waste to be received;
 - (C) the sources of waste to be received;
 - (D) the methods to control traffic and to expedite unloading;
 - (E) the methods for measuring incoming waste;
 - (F) the methods to control the types of waste received;
 - (G) the methods for removing non-compostable wastes from the incoming waste stream, including procedures for storage and disposal of these wastes;
 - (H) the location of disposal sites for non-compostable wastes;
 - (I) the method of composting;
 - (J) a list of equipment to be used;
 - (K) a description of any additives used in the process;
 - (L) a quality assurance and quality control plan that outlines the monitoring, sampling, and analysis plans for testing the compost process and product;
 - (M) the proposed end-use of compost;
 - (N) the methods to minimize, manage, and monitor odors;
 - (O) disease vector, dust, litter, and noise control measures;
 - (P) leachate and national pollutant discharge elimination system storm water control measures;
 - (Q) the plans for operations during wind, heavy rain, snow, freezing temperatures, or other inclement weather conditions;
 - (R) a contingency plan for events including equipment failure, power outages, natural disasters, fire, receipt of prohibited materials, or similar interruptions of normal activities; and
 - (S) a fire protection and control plan.
- (3) Closure plan. The closure plan shall include the following information:
- (A) The steps necessary to close the facility;
 - (B) the final surface contours; and
 - (C) a closure cost estimate based on the third-party cost of removing and disposing of the maximum amount of wastes that may be contained at the facility. (Authorized by and implementing K.S.A. 1997 Supp. 65-3406 and L. 1998, ch. 143, sec. 37; effective January 8, 1999.)

28-29-25e. Source-separated organic waste composting . For the purposes of this regulation, subsections (a), (b), (c), and (d) shall apply to each facility that composts source-separated organic waste and has a composting area of one-half acre or less. Subsections (a), (b), (c), and (e) of this regulation shall apply to each facility that composts source-separated organic waste and has a composting area larger than one-half acre.

(a) Facility design. The owner or operator of each facility that composts source-separated organic waste shall design and construct the facility to meet the following requirements:

- (1) Composting surface and drainage.
 - (A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.
 - (B) The facility shall not cause a discharge of pollutants into waters of the state in accordance with K.S.A. 65-164, and amendments thereto.
 - (C) Leachate control shall be provided wherever leachate is generated.

- (D) The composting area shall be graded to prevent ponding of liquids.
 - (E) The surface of the composting area shall be capable of supporting the equipment used.
- (2) Facility access.
- (A) At each facility that composts source-separated organic waste that is brought in from off-site, the following information shall be posted on one or more signs:
 - (i) Facility name;
 - (ii) permit number;
 - (iii) site hours;
 - (iv) traffic flow;
 - (v) a list of the materials appropriate for composting; and
 - (vi) the name and telephone number of an emergency contact person.
 - (B) Unauthorized dumping shall be discouraged by access control.
 - (C) Access roads shall be of all-weather construction and shall be negotiable at all times. Load limits on bridges and access roads shall be sufficient to support all traffic loads generated by the use of the facility.
- (3) Capacity and storage. The facility shall have the capacity to store the following materials:
- (A) Incoming materials waiting to be processed;
 - (B) the materials being processed; and
 - (C) the finished compost, not to exceed 18 months' production.
- (b) Facility operations.** The owner or operator of each facility that composts source-separated organic waste shall perform the following:
- (1) Minimize odors;
 - (2) control disease vectors, dust, litter, and noise;
 - (3) protect the facility from scavenging by animals;
 - (4) segregate incoming waste from finished compost;
 - (5) inform the public of disposal sites for waste not acceptable for composting at the facility;
 - (6) limit public access to hours when an attendant or any operating personnel are at the facility;
 - (7) begin processing incoming waste within 24 hours of receipt;
 - (8) if sewage sludge is composted, comply with 40 CFR Part 503, as in effect on February 19, 1993; and
 - (9) remove all finished compost within 18 months of the completion of the composting process.
- (c) Facility closure.** The owner or operator of each facility that composts source-separated organic waste shall perform the following:
- (1) Notify the department, in writing, at least 60 days before closure;
 - (2) remove all material from the facility within 10 days of ceasing operation; and
 - (3) clean all containers, equipment, machines, floors, and site surfaces that have been in contact with source-separated organic waste or solid waste.
- (d) Registration.** Each owner or operator of a facility that composts source-separated organic waste and has a composting area of one-half acre or less shall submit registration information to the department on a form provided by the department.
- (e) Permit applications.** The owner or operator of each facility that composts source-separated organic waste and has a composting area larger than one-half acre shall submit a permit application to the department on a form provided by the department. The applicant shall include the following items with the permit application:
- (1) Facility design plan. The facility design plan shall contain the following items:
 - (A) A 7.5 minute topographic map of the area, as typically available from the U.S. geological survey, indicating the facility boundary and the property boundary;
 - (B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;
 - (C) a 100-year floodplain map of the area, as typically available from the federal emergency management agency; and
 - (D) plan and profile views of the facility indicating the following features:

- (i) Roads;
 - (ii) the existing and final grades and contours;
 - (iii) storm water control;
 - (iv) buildings and equipment to be installed;
 - (v) utilities;
 - (vi) access control; and
 - (vii) all other structures.
- (2) Operations plan. The operations plan shall contain the following information:
- (A) Job descriptions of persons responsible for operation, control, and maintenance of the facility;
 - (B) the anticipated annual quantity of waste to be received, and the seasonal variations of the quantity of waste to be received;
 - (C) the sources of waste to be received;
 - (D) the methods to control traffic and to expedite unloading;
 - (E) the methods for measuring incoming waste;
 - (F) the methods to control the types of waste received;
 - (G) the methods for removing noncompostable wastes from the incoming waste stream, including procedures for storage and disposal of these wastes;
 - (H) the location of disposal site for noncompostable wastes;
 - (I) the method of composting;
 - (J) a description of equipment proposed to be used in composting, including equipment specifications and manufacturer's performance standards. The proposed equipment shall be compatible with the proposed process and throughput;
 - (K) a description of any additives used in the process;
 - (L) the methods for managing biological conditions;
 - (M) a quality assurance and quality control plan that outlines the monitoring, sampling, and analysis plans for testing the compost process and product;
 - (N) the proposed end use of compost;
 - (O) the methods to minimize, manage, and monitor odors;
 - (P) disease vector, dust, litter, and noise control measures;
 - (Q) leachate and national pollutant discharge elimination system storm water control measures;
 - (R) the plans for operations during wind, heavy rain, snow, freezing temperatures, or other inclement weather conditions;
 - (S) a contingency plan for events including equipment failure, power outages, natural disasters, fire, receipt of prohibited materials, or similar interruptions of normal activities; and
 - (T) a fire protection and control plan.
- (3) Closure plan. The closure plan shall include the following information:
- (A) The steps necessary to close the facility;
 - (B) the final surface contours; and
 - (C) a closure cost estimate based on the third-party cost of removing and disposing of the maximum amount of wastes that may be contained at the facility. (Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective October 1, 1999.)

28-29-25f. Solid waste composting . For the purposes of this regulation, subsections (a), (b), (c), and (d) shall apply to each facility that composts solid waste and has a composting area of one-half acre or less, except facilities that compost only yard waste, manure, dead animals, source-separated organic waste, or any combination of yard waste, manure, dead animals, and source-separated organic waste. Subsections (a), (b), (c), and (e) of this regulation shall apply to each facility that composts solid waste and has a composting area larger than one-half acre, except facilities that compost only yard waste, manure, dead animals, source-separated organic waste, or any combination of yard waste, manure, dead animals, and source-separated organic waste.

(a) Facility design. The owner or operator of each solid waste composting facility shall design and construct the facility to meet the following requirements:

- (1) Composting surface and drainage.
 - (A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.
 - (B) The facility shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.
 - (C) Leachate control shall be provided wherever leachate is generated.
 - (D) The composting area shall be graded to prevent ponding of liquids.
 - (E) The surface of the composting area shall be capable of supporting the equipment used.
 - (F) The floor shall be composed of a layer of material that is at least one foot thick and has a hydraulic conductivity no greater than 10^{-7} cm/sec, or the facility shall be designed to provide the same level of protection to the groundwater.
 - (G) The receiving, processing, and curing areas shall be covered by a roof, or the facility shall be designed to provide the same level of protection from the weather.

(2) Facility access.

- (A) At each facility that composts solid waste that is brought in from off-site, the following information shall be posted on one or more signs:
 - (i) Facility name;
 - (ii) permit number;
 - (iii) site hours;
 - (iv) traffic flow;
 - (v) a list of the materials appropriate for composting; and
 - (vi) the name and telephone number of an emergency contact person.
- (B) Unauthorized dumping shall be discouraged by access control.
- (C) Access roads shall be of all-weather construction and shall be negotiable at all times. Load limits on bridges and access roads shall be sufficient to support all traffic loads generated by the use of the facility.

(3) Capacity and storage. The facility shall have the capacity to store the following materials:

- (A) Incoming materials waiting to be processed;
- (B) the materials being processed; and
- (C) the finished compost, not to exceed 18 months' production.

(b) Facility operations. The owner or operator of each solid waste composting facility shall perform the following:

- (1) Minimize odors;
- (2) control disease vectors, dust, litter, and noise;
- (3) protect the facility from scavenging by animals;
- (4) segregate incoming waste from finished compost;
- (5) inform the public of disposal sites for waste not acceptable for composting at the facility;
- (6) limit public access to hours when an attendant or any operating personnel are at the facility.
- (7) begin processing incoming waste within 24 hours of receipt;
- (8) use one of the following processes to further reduce pathogens (PFRP):
 - (A) Windrow composting method. When using this method, the following conditions shall be met:
 - (i) Aerobic conditions shall be maintained within the windrow;
 - (ii) the waste shall attain a temperature of 55° C, 131° F, or greater for at least 15 days during the composting period; and
 - (iii) the windrow shall be turned a minimum of five times during the high temperature period;
 - (B) Aerated static pile composting method. When using this method, the waste shall be covered with six to 12 inches of insulating material and maintained at a temperature of 55° C, 131° F, or greater for a minimum of three consecutive days;
 - (C) Enclosed-vessel composting method. When using this method, the waste shall be maintained at a temperature of 55° C, 131° F, or greater for a minimum of three consecutive days; or
 - (D) any other method approved by the department;

- (9) record the following information:
 - (A) The temperature and moisture content of materials during the composting process, in accordance with the operating plan;
 - (B) the daily volume or weight of waste received;
 - (C) the source of waste;
 - (D) all laboratory analyses required by the permit; and
 - (E) the volume of recovered materials; and
- (10) remove all finished compost within 18 months of the completion of the composting process.
- (c) Facility closure.** The owner or operator of each facility that composts solid waste shall perform the following:
 - (1) Notify the department, in writing, at least 60 days before closure;
 - (2) remove all material from the facility within 10 days of ceasing operation; and
 - (3) clean all containers, equipment, machines, floors, and site surfaces that have been in contact with solid waste.
- (d) Registration.** Each owner or operator of a facility that composts solid waste and has a composting area of one-half acre or less shall submit registration information to the department on a form provided by the department.
- (e) Permit applications.** The owner or operator of each facility that composts solid waste and has a composting area larger than one-half acre shall submit a permit application to the department on a form provided by the department. The applicant shall include the following items with the permit application:
 - (1) Facility design plan. The facility design plan shall contain the following items:
 - (A) A 7.5 minute topographic map of the area, as typically available from the U.S. geological survey, indicating the facility boundary and the property boundary;
 - (B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;
 - (C) a 100-year floodplain map of the area, as typically available from the federal emergency management agency;
 - (D) plan and profile views of the facility indicating the following features:
 - (i) Roads;
 - (ii) the existing and final grades and contours;
 - (iii) storm water control;
 - (iv) buildings and equipment to be installed;
 - (v) utilities;
 - (vi) access control; and
 - (vii) all other structures;
 - (E) information on the permeability of the floor structure; and
 - (F) a flow diagram of the proposed processing steps involved in recovering recyclable materials and mixed organic material from solid waste, including a total mass balance.
 - (2) Operations plan. The operations plan shall contain the following information:
 - (A) Job descriptions of persons responsible for operation, control, and maintenance of the facility;
 - (B) the anticipated annual quantity of waste to be received, and the seasonal variations of the quantity of waste to be received;
 - (C) the sources of waste to be received;
 - (D) the methods to control traffic and to expedite unloading;
 - (E) the methods for measuring incoming waste;
 - (F) the methods to control the types of waste received;
 - (G) the methods for removing noncompostable wastes from the incoming waste stream, including procedures for storage and disposal of these wastes;
 - (H) the location of disposal sites for noncompostable wastes;
 - (I) the method of composting;

- (J) a description of equipment proposed to be used in composting, including equipment specifications and manufacturer's performance standards. The proposed equipment shall be compatible with the proposed process and throughput;
 - (K) a description of any additives used in the process;
 - (L) the methods for managing biological conditions;
 - (M) a quality assurance and quality control plan that outlines the monitoring, sampling, and analysis plans for testing the compost process and product;
 - (N) the proposed end use of compost;
 - (O) the methods to minimize, manage, and monitor odors;
 - (P) disease vector, dust, litter, and noise control measures;
 - (Q) leachate and national pollutant discharge elimination system storm water control measures;
 - (R) the plans for operations during wind, heavy rain, snow, freezing temperatures, or other inclement weather conditions;
 - (S) a contingency plan for events including equipment failure, power outages, natural disasters, fire, receipt of prohibited materials, or similar interruptions of normal activities; and
 - (T) a fire protection and control plan.
- (3) Closure plan. The closure plan shall include the following information:
- (A) The steps necessary to close the facility;
 - (B) the final surface contours; and
 - (C) a closure cost estimate based on the third-party cost of removing and disposing of the maximum amount of wastes that may be contained at the facility. (Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective October 1, 1999.)

28-29-26. (Authorized by and implementing K.S.A. 1983 Supp. 65-3406; effective May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked June 4, 1999.)

28-29-27. Medical services waste.

- (a) "**Medical services waste**" means those solid waste materials which are potentially capable of causing disease or injury and which are generated in connection with human or animal care through inpatient and outpatient services. Medical services waste shall not include any solid waste which has been classified by the secretary as a hazardous waste under K.S.A. 1982 Supp. 65-3431 and any amendments thereto, or that is radioactive treatment material licensed under K.S.A. 1982 Supp. 48-1607 and regulations adopted under that statute.
- (b) **Segregation.** All medical services waste shall be segregated from other solid wastes at the point of origin.
- (c) **Storage.** All medical services waste shall be stored in a manner and in a container that will prevent the transmission of disease or the causing of injury. Hypodermic needles and syringes, scalpel blades, suture needles, or other sharp objects shall be stored only in a rigid, puncture-resistant container that has been closed to prevent the escape of any material, including liquids or aerosols. All reusable containers used to store infectious waste shall be cleaned and disinfected before each use.
- (d) **Collection.** Medical services wastes shall be collected at least daily from the point of origin for transport to a storage or disposal area or a processing facility. Personnel shall take precautions to prevent accidental contact with the waste during transfer.
- (e) **Transportation.** All medical services wastes transported off-site shall be transported in a manner which will prevent the spread of disease or the causing of injury to persons.
 - (1) The waste transporter or disposal firm shall be notified of the types of waste.
 - (2) Containers of medical services waste transported off-site shall be labeled or color coded in accordance with 29 CFR 1910.1030(g)(1)(i), as in effect on July 1, 1996.
- (f) **Processing.** In all processing of medical services waste, dispersal of aerosols and liquids shall be prevented through the use of proper coverings, seals, and ventilation. Personnel shall be protected against contact with the waste through the use of protective clothing and equipment. Medical services waste that has been

processed may be combined with other solid waste. Where feasible, all medical services wastes shall be processed before transportation off-site by using either of the following methods:

- (1) Sterilizing infectious wastes by autoclaving or chemical treatment, to destroy the disease- transmission potential; or
 - (2) grinding, melting, or pulverizing sharp objects to destroy their injury producing potential.
- (g) Disposal.** Medical services waste shall be disposed of in a manner which minimizes the risk to health, safety, or the environment. The following shall be considered acceptable disposal methods:
- (1) Discharge of liquids to a sanitary sewer which is connected to a secondary sewage treatment plant;
 - (2) incineration of combustible solids, followed by disposal of the ash in a sanitary landfill;
 - (3) disposal in a hazardous waste disposal facility which has a permit issued under ~~K.A.R. 28-31-9~~ K.A.R. 28-31-270; [Note: modified by 28-29-1a] or
 - (4) disposal in a sanitary landfill in accordance with the provisions of K.A.R. 28-29-109. (Authorized by and implementing K.S.A. 1996 Supp. 65-3406, as amended by L. 1997, Ch. 139, Sec. 1; effective May 1, 1982; amended, T-84-41, Dec. 21, 1983; effective May 1, 1984; amended July 10, 1998.)

STANDARDS FOR WASTE TIRE MANAGEMENT

28-29-28. Definitions. For the purposes of these regulations, the following terms shall be defined as follows.

- (a)** “Contaminated waste tire” shall have the meaning specified in K.S.A. 65-3424 and amendments thereto. A waste tire shall be deemed “substantially unsuitable for processing” if the volume of material with which the tire is coated or filled is estimated to be equal to or greater than 50% of the combined volume of the waste tire and contaminant. The determination that a waste tire is a contaminated waste tire shall be based on an inspection by the secretary or the secretary’s designee.
- (b)** “Financial assurance” means a bond or other instrument that meets the requirements of K.A.R. 28-29-2101 through K.A.R. 28-29-2113.
- (c)** “Passenger tire equivalent” means 20 pounds of tires or processed waste tires.
- (d)** “Retreader” means a person engaged in the business of recapping tire casings to produce recapped tires for sale to the public.
- (e)** “Rick” means to stack tires securely by overlapping so that the center of a tire is offset from the center of the tire below it.
- (f)** “Waste tire monofill” means a permitted solid waste landfill or landfill cell in which only processed waste tires are placed.
- (g)** “Waste tire transporter” means a person who transports waste tires from a location in Kansas or to a location in Kansas. “Waste tire transporter” shall not mean a person transporting waste tires through Kansas, if both the origin and the destination of the waste tires are outside of Kansas. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; amended Sept. 12, 1997; amended Oct. 26, 2007.)

28-29-28a. Establishing value of used tires.

- (a)** Used tires at a waste tire collection center shall be considered to have value if the owner of the used tires demonstrates to the department, through sales and inventory records, that the used tires are being sold at a rate equal to or greater than 75% of the daily used tire inventory per year.
- (b)** Each owner of used tires at a waste tire collection center shall choose one of the following methods to determine the daily used tire inventory.
 - (1) The owner of the used tires shall count the used tires on the day of inspection by the department and shall use that number as the daily used tire inventory for the purpose of establishing the value of the used tires.
 - (2) The owner of the used tires shall inventory all the used tires at the waste tire collection center at least once every month and shall use the average (mean) of these monthly inventories to calculate the daily used tire inventory for the purpose of establishing the value of the used tires. The owner of the used tires shall maintain a record of each monthly inventory for at least 12 months after the monthly inventory and shall provide the department with the monthly inventory records on request.

- (c) Each owner of used tires at a waste tire collection center shall maintain used tire sales records for at least 12 months after the sale and shall provide the department with the sales records on request.
- (d) Any owner of used tires at a waste tire collection center who has fewer than 12 months of sales records available may use the following equation to calculate the sales rate, in terms of percent of the daily used tire inventory sold per year, as described in subsection (a) of this regulation:

$$\left(\frac{\left(\text{number of used tires sold within } x \text{ months} \right) \left(\frac{12}{x} \right)}{\text{daily used tire inventory}} \right) 100 = \%$$

“x” means the number of months for which sales records are available. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 1996 Supp. 65-3424b; effective September 12, 1997.)

28-29-29. Waste tire processing and disposal standards.

- (a) Any person may dispose of waste tires by landfilling, if the waste tires meet the criteria specified for the landfill disposal of waste tires in K.S.A. 65-3424a, and amendments thereto.
- (b) The processing of waste tires for landfill disposal, as required by K.S.A. 65-3424a and amendments thereto, shall be accomplished by any of the following means:
 - (1) Shredding;
 - (2) cutting in half along the circumference;
 - (3) cutting into at least four parts, with no part being greater than 1/3 of the original tire size;
 - (4) chipping;
 - (5) crumbing;
 - (6) baling in a manner that reduces the volume of the waste tires by at least 50%; or
 - (7) using an equivalent volume-reduction process that has received prior approval, in writing, from the secretary.
- (c) Any person may process waste tires by burning, incineration, or other combustion process, including use as an alternative fuel, if the person performs all of the following:
 - (1) Obtains a waste tire processing facility permit or a mobile waste tire processor permit from the secretary;
 - (2) conducts the burning, incineration, or other combustion process in compliance with the Kansas air quality act, K.S.A. 65-3001 et seq. and amendments thereto, and its implementing regulations in article 19; and
 - (3) handles all residue from the burning, incineration, or other combustion process by either or both of the following means:
 - (A) Disposal at a landfill permitted for disposal of the residue; or
 - (B) recycling.
 (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424a; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; amended Sept. 12, 1997; amended March 22, 2002; amended Oct. 26, 2007.)

28-29-29a. Beneficial use of waste tires. “Beneficial use” shall have the meaning specified in K.S.A. 65-3424, and amendments thereto.

- (a) Approved beneficial use.
 - (1) Any person may use or store waste tires for a beneficial use if all of the following requirements are met:
 - (A) The use or storage is listed in the definition of “beneficial use” in K.S.A. 65-3424, and amendments thereto.
 - (B) The use or storage is conducted in accordance with subsections (b) and (c).
 - (C) The use or storage has no adverse impact on public health and safety and the environment.
 - (2) Each person that plans to use or store waste tires for a beneficial use that is not listed in the definition of “beneficial use” in K.S.A. 65-3424, and amendments thereto, shall submit an application for approval to

the department, on a form provided by the department. The use or storage may be approved by the secretary if the use or storage meets the criteria specified in K.S.A. 65-3424, and amendments thereto.

- (b) Management standards for all beneficial uses. The owner of the waste tires shall manage the waste tires in a manner that meets these requirements:
- (1) Controls mosquitoes and other disease vectors, as specified in K.A.R. 28-29-29b; and
 - (2) minimizes the risk and impact of fire.
- (c) Management standards for specific beneficial uses. The owner of waste tires used for any of the following beneficial uses shall meet the following requirements for that use:
- (1) Windbreaks constructed of baled tires. The owner shall comply with the following requirements:
 - (A) Construct and maintain a stable base for the windbreak;
 - (B) construct the windbreak to be 200 feet or less in length;
 - (C) construct the windbreak to be three bales or less in height;
 - (D) repair all broken wires on the bales; and
 - (E) follow the fire control standards for the outdoor storage of tires specified in K.A.R. 28-29-31.
 - (2) Windbreaks constructed of waste tires that are not baled. The owner shall comply with the following requirements:
 - (A) Construct the windbreak to be 200 feet or less in length;
 - (B) construct the windbreak to be eight feet or less in height;
 - (C) place poles, either in the center of the waste tire stacks or next to the waste tire stacks, to stabilize the waste tires;
 - (D) fill each stack of waste tires with sand or soil; and
 - (E) follow the fire control standards for the outdoor storage of tires specified in K.A.R. 28-29-31.
 - (3) Erosion control on the face of an earthen dam. The owner shall comply with the following requirements:
 - (A) Place the waste tires in a secure manner that ensures the longevity of the project;
 - (B) fill each tire with rock or mortar that will not be washed out by wave action;
 - (C) offset the rows of waste tires for stability; and
 - (D) place the tires to extend below the normal water level.
 - (4) Stabilization of soil or sand blowouts caused by wind. The owner shall perform the following:
 - (A) Place the waste tires in a random pattern or in rows perpendicular to the prevailing wind direction;
 - (B) confine the tires to an area of one-half acre or less; and
 - (C) after a vegetative cover has been established, remove each waste tire from the site if both of the following conditions are met:
 - (i) Less than one-half of the tire is covered by sand; and
 - (ii) removing the tire will not damage the vegetative cover.
- (d) Cessation of beneficial use. The owner shall manage all waste tires that have ceased to be of beneficial use in accordance with K.S.A. 65-3424 et seq., and amendments thereto, and the implementing regulations in article 29. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424; effective Sept. 12, 1997; amended Oct. 26, 2007.)

28-29-29b. Pest control requirements for the storage of new tires, used tires, waste tires, and processed waste tires.

- (a) Pest control requirements. The owner or operator of each site that contains an accumulation of new tires, used tires, waste tires, or processed waste tires, or any combination of these, shall operate and maintain the accumulation in a manner that controls mosquito breeding and other disease vectors. The determination that mosquitoes are breeding shall be based on the presence of mosquito larvae in the tires or processed waste tires.
- (b) Pesticide application. Each person that applies pesticides shall comply with the Kansas pesticide act, K.S.A. 2-2438a et seq. and amendments thereto. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective Oct. 26, 2007.)

28-29-30. Waste tire processing facility, waste tire collection center, and mobile waste tire processor permit required.

- (a) Submission of application. Each person required to obtain a waste tire processing facility permit, a waste tire collection center permit, or a mobile waste tire processor permit, as specified in K.S.A. 65-3424b and amendments thereto, shall submit an application to the department.
- (1) Each application shall be submitted on forms provided by the department.
 - (2) Each application shall be submitted to the department at least 90 days before operations are planned to begin.
- (b) Waste tire processing facility and waste tire collection center permit applications. Each applicant for a waste tire processing facility or waste tire collection center permit shall include the following items in the application:
- (1) Proof of consistency with zoning or land use requirements;
 - (2) a description of the land use within a radius of one-half mile of the facility, identifying all buildings and surface waters;
 - (3) the following maps:
 - (A) A site location map showing section, township, range, and site boundaries;
 - (B) a site layout drawing showing the size and location of all pertinent artificial and natural features of the site, including roads, fire lanes, ditches, berms, waste tire storage areas, structures, wetlands, floodways, and surface waters; and
 - (C) a topographic map that has a scale of no less than one inch equals 2,000 feet, and that has a contour interval of 10 feet or less;
 - (4) a design plan, including equipment placement and a process flow diagram;
 - (5) an operations plan for the processing facility or collection center that includes the following information:
 - (A) The storage capacity for waste tires and processed waste tires, in passenger tire equivalents;
 - (B) the procedures that the facility owner or operator proposes to use to meet the mosquito and rodent control requirements of K.A.R. 28-29-29b;
 - (C) for waste tire collection centers, the proposed methods and schedule for storage of the waste tires before removal from the site; and
 - (D) for waste tire processing facilities, the following information:
 - (i) The proposed methods and schedule for the processing or disposal of waste tires;
 - (ii) the procedures that the facility owner or operator proposes to use to meet the waste tire processing standards in K.A.R. 28-29-29; and
 - (iii) a description of all equipment to be used in the waste tire processing operation;
 - (6) a contingency plan to minimize damage from fire and other emergencies at the site, including procedures for the following:
 - (A) Minimizing the occurrence or spread of fires;
 - (B) reporting all environmental problems, including fires, to the department;
 - (C) remediating the site;
 - (D) operating the facility when equipment fails; and
 - (E) operating the facility during inclement weather;
 - (7) proof that the applicant owns the site or has a lease for the site that runs at least one year. The permit shall be valid only for the location specified on the permit application;
 - (8) a closure plan that includes the following information:
 - (A) A description of when and why the operator would suspend the receipt of waste tires at the facility;
 - (B) a description of how all waste tires and processed waste tires will be removed from the site or otherwise properly disposed of upon closure;
 - (C) a time schedule for completing the closure procedures; and
 - (D) a plan for site rehabilitation and remediation;
 - (9) a closure cost estimate based on the cost to close the facility following the requirements of K.A.R. 28-29-31 and K.A.R. 28-29-31a. The cost of removing processed waste tires from the site shall not be

- required to be included in the closure cost estimate if the permittee demonstrates to the department that the processed waste tires have a positive market value;
- (10) documentation of financial assurance issued in favor of the department that meets the requirements of K.A.R. 28-29-2101 through K.A.R. 28-29-2113; and
- (11) the applicable application fee specified in K.A.R. 28-29-2011.
- (c) Mobile waste tire processor permit applications. Each applicant for a mobile waste tire processor permit shall include the following items in the application:
- (1) A description of all equipment to be used in the mobile waste tire processing operation;
 - (2) documentation of financial assurance issued in favor of the department that meets the requirements of K.A.R. 28-29-2101 through K.A.R. 28-29-2113; and
 - (3) the application fee specified in K.A.R. 28-29-2011.
- (d) Permit renewal. As specified in K.S.A. 65-3424b and amendments thereto, each waste tire processing facility permit, waste tire collection center permit, and mobile waste tire processor permit shall be issued for a one-year period. Any permittee may apply to the secretary for permit renewal by submitting the renewal application to the department at least 30 days before the permit expiration date. Each renewal application shall be submitted on forms provided by the department and shall include the following items:
- (1) For each waste tire processing facility permit and each waste tire collection center permit, the following items:
 - (A) An annual operations report that summarizes the information required in K.A.R. 28-29-31a(c);
 - (B) an updated closure cost estimate;
 - (C) documentation of updated financial assurance that meets the financial assurance requirements in K.A.R. 28-29-2101 through K.A.R. 28-29-2113; and
 - (D) the applicable permit renewal fee specified in K.A.R. 28-29-2011; and
 - (2) for each mobile waste tire processor permit, the following items:
 - (A) An annual operations report that summarizes the information required in K.A.R. 28-29-31a(c);
 - (B) documentation of financial assurance that meets the financial assurance requirements in K.A.R. 28-29-2101 through K.A.R. 28-29-2113; and
 - (C) the permit renewal fee specified in K.A.R. 28-29-2011.
- (e) Permit modifications. Any waste tire processing facility, waste tire collection center, or mobile waste tire processor permittee may request from the secretary a permit modification to modify the operations authorized in an unexpired permit. The procedure for modifying permits specified in K.A.R. 28-29-8 shall apply.
- (f) Transfers of ownership. The permittee shall provide notice of plans to transfer ownership of any facility or business permitted under these regulations to the department at least 60 days before the transfer. Each permit shall be issued only for the person or persons and the premises or business named in the permit. As specified in K.S.A. 65-3424k and amendments thereto, permits shall not be transferable. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; amended Sept. 12, 1997; amended Oct. 26, 2007.)

28-29-31. Requirements for storage of waste tires, used tires, and processed waste tires.

- (a) Outdoor storage of waste tires, used tires, or both.
- (1) The requirements in this regulation for outdoor storage of tires shall not apply to tires stored in trailers or covered containers.
 - (2) Each person storing the tires shall meet the pest control standards specified in K.A.R. 28-29-29b.
- (b) Outdoor storage of more than 500 used tires, 500 waste tires, or 500 used and waste tires. Each person storing the tires shall meet the following requirements:
- (1) Locate the tires outside all wetlands;
 - (2) store tires that have been or will be stored for more than 30 days by one or more of the following means:
 - (A) Ricking;
 - (B) storing in racks; or
 - (C) storing on tread; and

- (3) limit the size of each storage area to less than the following dimensions:
 - (A) 50 feet in width;
 - (B) 5,000 square feet in area; and
 - (C) 10 feet in height.
- (c) Outdoor storage of 1,500 or more used tires, waste tires, or used and waste tires. Each person storing the tires shall meet the requirements of subsection (b) of this regulation and the following requirements:
 - (1) Locate each storage area at least 60 feet from each building;
 - (2) provide access to each storage area for fire-fighting equipment by either of the following means:
 - (A) Developing a 50-foot wide fire lane around the perimeter of each storage area. The person storing the tires shall maintain the fire lane and an approach and access road to each storage area, which shall be passable for any fire-fighting vehicle at all times; or
 - (B) obtaining certification from the local fire department stating that there is adequate access to each storage area for fire-fighting equipment;
 - (3) prohibit all activities involving the use of open flames, smoking materials, and other ignition sources within 25 feet of each storage area;
 - (4) maintain all vegetation within 100 feet of each storage area in a manner that minimizes fire hazard.
- (d) Outdoor storage of processed waste tires. The requirements in this regulation for the outdoor storage of processed waste tires shall not apply to processed waste tires stored in trailers or covered containers.
 - (1) Each person storing processed waste tires in an amount equal to or greater than the amount derived from 500 passenger tire equivalents shall store the processed waste tires according to the requirements in paragraphs (b)(1) and (b)(3) of this regulation, replacing the term “tire” with “processed waste tires.”
 - (2) Each person storing processed waste tires in an amount equal to or greater than the amount derived from 1,500 passenger tire equivalents shall store the processed waste tires according to the requirements in paragraph (d)(1) and in paragraphs (c)(1) through (c)(4) of this regulation, replacing the term “tire” with “processed waste tires.”
- (e) Removal of contamination. If pyrolytic oil from a tire fire is released into the environment, each person storing the tires or the processed waste tires shall remove the oil and contaminated soil in accordance with the solid and hazardous waste regulations in articles 29 and 31 governing the removal, transportation, and disposal of the material.
- (f) Closure of storage sites. When a storage site for waste tires, used tires, or processed waste tires closes, each person storing the tires or processed waste tires shall perform the following:
 - (1) Remove all waste tires and processed waste tires in accordance with the tire management standards of K.S.A. 65-3424 et seq., and amendments thereto, and the requirements of K.A.R. 28-29-28 through K.A.R. 28-29-33; and
 - (2) remove all other solid waste to a permitted solid waste disposal area. (Authorized by K.S.A. 65-3406 and 65-3424h; implementing K.S.A. 65-3406 and K.S.A. 2006 Supp. 65-3424b; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; amended Sept. 12, 1997; amended Oct. 26, 2007.)

28-29-31a. Requirements for permitted waste tire processing facilities, waste tire collection centers, and mobile waste tire processors.

- (a) Access for fire-fighting equipment. Each permittee that obtains certification from the local fire department, as specified in K.A.R. 28-29-31, shall submit a copy of the certification to the department.
- (b) Site access. The permittee of each waste tire collection center and each waste tire processing facility shall perform the following:
 - (1) Control access to the site;
 - (2) post a sign at the entrance of the site stating the following information:
 - (A) The name of the site;
 - (B) the permit number;
 - (C) the site’s telephone number, if there is one;
 - (D) the 24-hour emergency telephone number; and
 - (E) if the site is open to the public, the hours of operation; and

- (3) have an attendant present at all times when the waste tire processing facility or waste tire collection center is open for business.
- (c) Recordkeeping. Each permittee shall retain the records required by this subsection at the facility or business for a minimum of three years. All quantities of tires and processed waste tires shall be recorded in passenger tire equivalents.
 - (1) Mobile waste tire processors. The permittee shall maintain records of the following information for each site at which waste tires were processed:
 - (A) The address or legal description;
 - (B) the landowner's name and address;
 - (C) the dates of arrival and departure of the mobile waste tire processor; and
 - (D) the quantity of waste tires processed.
 - (2) Waste tire processing facilities and waste tire collection centers. The permittee shall maintain monthly records of the following information:
 - (A) The quantity of waste tires received;
 - (B) for waste tire processing facilities, the quantity of waste tires processed;
 - (C) the quantity of waste tires and processed waste tires removed from the site; and
 - (D) each location to which waste tires or processed waste tires have been taken for use or disposal.
- (d) Closure of waste tire processing facilities and waste tire collection centers.
 - (1) The permittee of each waste tire processing facility and each waste tire collection center shall cease to accept waste tires and shall close the waste tire processing facility or waste tire collection center in compliance with these regulations and with any special closure conditions established in the facility permit, if any of the following conditions is met:
 - (A) The permittee informs the secretary that the site is closed.
 - (B) A departmental order to cease operations is issued.
 - (C) A permit compliance schedule specifying closure is to begin.
 - (D) The owner fails to renew the permit.
 - (E) The permit is revoked.
 - (2) If the waste tire processing facility or waste tire collection center closes, the permittee shall perform the following:
 - (A) Close public access to the waste tire site;
 - (B) post a notice at the site entrance indicating to the public that the site is closed and, if the site had accepted waste tires from the public, indicating the nearest site where waste tires can be lawfully deposited;
 - (C) notify the department and the local government having jurisdiction over the site of the closing of the permitted waste tire processing facility or waste tire collection center; and
 - (D) submit certification to the department that the closure has been completed in compliance with the closure plan.
 - (3) All financial assurance not needed for the closure or for other purposes under this subsection shall be released to the permittee by the secretary. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective Oct. 26, 2007.)

28-29-32. Waste tire transporter permits.

- (a) Submission of application. Each person required to obtain a waste tire transporter permit, as specified in K.S.A. 65-3424b and amendments thereto, shall submit an application to the department. Each application shall be submitted on forms provided by the department.
- (b) Waste tire transporter application. Each applicant for a waste tire transporter permit shall include the following items in the application:
 - (1) The address or legal description of each location where the waste tires will be transported for storage, processing, or disposal;
 - (2) an estimate of the number of tires that will be transported each month;
 - (3) a list of equipment that will be used;

- (4) documentation of financial assurance issued in favor of the department that meets the requirements in K.A.R. 28-29-2101 through K.A.R. 28-29-2113; and
 - (5) the application fee listed in K.A.R. 28-29-2011.
- (c) Permit renewal. Each waste tire transporter permit shall be issued for a one-year period. Any permitted waste tire transporter may apply to the secretary for permit renewal by submitting the renewal application to the department at least 30 days before the permit expiration date. Each permit renewal application shall be submitted on a form provided by the department and shall include the following items:
- (1) An annual operations report that summarizes the information required in K.A.R. 28-29-33(b);
 - (2) an updated equipment list;
 - (3) documentation of updated financial assurance that meets the financial assurance requirements in K.A.R. 28-29-2101 through K.A.R. 28-29-2113; and
 - (4) the permit renewal fee listed in K.A.R. 28-29-2011.
- (d) Multiple business locations. Any corporation that has more than one separate business location may submit one waste tire transporter permit application that provides for services to all of the corporation's locations.
- (e) Permits that are no longer active. If a waste tire transporter permit is not renewed, or is revoked or suspended, the former permittee shall remove all copies of the waste tire transporter permit from its vehicles.
- (1) The former permittee shall remove all copies of the waste tire transporter permit either on the renewal date or on the day on which the former permittee receives notification that the waste tire transporter permit is no longer active, whichever occurs first.
 - (2) Within 14 days after revocation, suspension, or the renewal date, the former permittee shall surrender the original permit to the department and notify the department, in writing, that all copies of the waste tire transporter permit have been removed from all vehicles. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; amended Sept. 12, 1997; amended Oct. 26, 2007.)

28-29-33. Requirements for permitted waste tire transporters. Each person required to obtain a waste tire transporter permit shall perform the following:

- (a) Display a copy of the person's current waste tire transporter permit in each vehicle that transports waste tires;
- (b) record and maintain for three years the following information regarding activities for each month of operation:
 - (1) The number of waste tires transported;
 - (2) the name of the previous owner of the waste tires and the address or legal description of the location from which the waste tires were collected; and
 - (3) the name of the subsequent owner of the waste tires and the address or legal description of the location at which the waste tires were deposited; and
- (c) transport waste tires only to a person or landfill authorized to receive waste tires, pursuant to K.S.A. 65-3424a and amendments thereto. (Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; amended Sept. 12, 1997; amended Oct. 26, 2007.)

28-29-34 to 28-29-36. (Authorized by K.S.A. 1991 Supp. 65-3424h; implementing K.S.A. 1991 Supp. 65-3424f; effective, T-28-4-27-92, April 27, 1992; effective June 8, 1992; revoked September 12, 1997.)

STANDARDS FOR MANAGEMENT OF HAZARDOUS WASTES

[Note: Hazardous waste regulations are found at K.A.R. 28-31-4 et seq.]

28-29-37 to 28-29-44. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended E-82-8, April 10, 1981; revoked, E-82-20, Nov. 4, 1981; revoked May 1, 1982.)

28-29-45. (Authorized by K.S.A. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-46. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked E-82-20, Nov.4, 1981; revoked May 1, 1982.)

28-29-47. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-48 and 28-29-49. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended E-82-8, April 10, 1981, revoked, E-82-20, Nov. 4, 1981; revoked May 1, 1982.)

28-29-50. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-51 to 28-29-53. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 19981; revoked, E-82-20, Nov. 4, 1981; revoked May 1, 1982.)

28-29-54 to 28-29-56. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-57 to 28-29-63. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked, E-82-20, Nov. 4, 1981; revoked May 1, 1982.)

28-29-64. (Authorized by K.S.A. 65-3406; effective, E-82-8, April 10, 1981; revoked, E-82-20, Nov 4, 1981.)

28-29-65. (Authorized by K.S.A. 65-3406; effective, E-82-8, April 10, 1981; revoked, E-82-20, Nov. 4, 1981; revoked May 1, 1982.)

28-29-66 to 28-29-74. Reserved.

SOLID WASTE MANAGEMENT PLANS

28-29-75. Solid waste management (SWM) plans and committees; general provisions.

(a) Each county shall prepare, adopt, and submit to the secretary an SWM plan as specified in K.S.A. 65-3405, and amendments thereto, and K.A.R. 28-29-75 through K.A.R. 28-29-82.

(b) Each county or group of counties shall establish an SWM committee, as specified in K.S.A. 65-3405 and amendments thereto. (Authorized by K.S.A. 65-3405 and K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-76. The solid waste management (SWM) committee . Each county commission for counties planning individually, or the SWM committee on behalf of the county commissions of each county participating in a regional SWM plan, shall submit the following information to the department within the deadlines specified:

(a) Within 60 days after the SWM committee is formed, a list of the SWM committee members. The list, and each update to the list, shall include the following information for each SWM committee member:

(1) The name;

(2) the political entity, business, or organization that the committee member represents; and

(3) the address, telephone number, and if available, the e-mail address; and

(b) within 60 days of the event, each change in the designation of the chairperson or the contact person of the SWM committee. (Authorized by K.S.A. 65-3405 and K.S.A 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-77. The SWM plan.

- (a) Each SWM committee shall establish an SWM plan that meets the requirements of K.S.A. 65-3405, and amendments thereto, and provides the following:
- (1) Access for each person in the county or region to service providing for the disposal of all nonhazardous residential, commercial, and industrial solid waste; and
 - (2) a process for the orderly and systematic elimination of nuisances and pollution sources associated with the following solid waste management activities:
 - (A) Storage;
 - (B) collection;
 - (C) transportation;
 - (D) processing; and
 - (E) disposal.
- (b) Each SWM committee shall include in the SWM plan information, if available, from federal, state, and local sources pertaining to the following topics:
- (1) Present and projected population and densities;
 - (2) present and anticipated industries;
 - (3) utilities;
 - (4) solid waste collection, transportation, processing, and disposal facilities;
 - (5) present and anticipated land, air, and water usage;
 - (6) present and projected transportation patterns;
 - (7) present and projected sources of solid wastes;
 - (8) assessed property values and the ability to fund the SWM system;
 - (9) types of soil, geology, and hydrology;
 - (10) air pollution, sewage, water resources, and public water supply; and
 - (11) local and regional land-use and development plans.
- (c) Each SWM committee shall include in the SWM plan all information required by K.S.A. 65-3405, and amendments thereto, and the following information:
- (1) A description of all sources of solid waste within the county or region or coming into the county or region;
 - (2) an estimate of solid waste storage, collection, transportation, processing, and disposal requirements for the area covered by the SWM plan for the next 10 years;
 - (3) a description of the projected demands and obstacles that could be caused by the existing solid waste storage, collection, transportation, processing, and disposal system;
 - (4) a description of the selected SWM system, including the following:
 - (A) Collection, transportation, processing, storage, and disposal methods;
 - (B) locations for disposal sites or processing facilities, or both; and
 - (C) plans for management of the wastes listed in K.S.A. 65-3405, and amendments thereto, and the following wastes:
 - (i) Tires;
 - (ii) industrial wastes;
 - (iii) agricultural wastes;
 - (iv) abandoned automobiles; and
 - (v) other wastes that could require special handling, transportation, processing, or disposal;
 - (5) a description of options for development and implementation of recycling, composting, source reduction, and volume-based pricing in relationship to the selected SWM system;
 - (6) a 10-year timetable for the completion of all necessary steps required to implement the selected SWM system;
 - (7) a description of local provisions for regulation of storage, collection, transportation, disposal, and other SWM activities;

- (8) a description of the responsibilities and actions required by each individual unit of government involved; and
- (9) a method for financing each element of the selected SWM system based on cost estimates. Revenue financing, general obligation financing, and other financing methods may be analyzed individually or in combination.
- (d) Each county that withdraws from a regional SWM plan shall prepare and submit to the department a new SWM plan meeting the requirements of K.S.A. 65-3405, and amendments thereto, and this regulation.
 - (1) The county shall submit the new SWM plan to the department on or before the date of the next annual review or the date by which the five-year update of the regional plan is required to be submitted to the department, whichever is first.
 - (2) The county shall be subject to the conditions of the regional SWM plan until the new SWM plan for the county is approved by the secretary.
- (e) A copy of the SWM plan shall be maintained in each county participating in the plan in a place accessible to the public. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-78. Review and adoption of a new SWM plan.

- (a) Each SWM committee shall develop a new SWM plan in accordance with the requirements of this regulation if any of the following occurs:
 - (1) The dissolution of a region;
 - (2) a change in the member counties of a region;
 - (3) the withdrawal from a region of a county that elects to plan individually;
 - (4) the formation of a new region; or
 - (5) the transfer of planning responsibility either to or from a designated city.
- (b) The SWM committee shall submit the new SWM plan for review to each official land-use planning agency and each official comprehensive planning agency within the area covered by the new SWM plan. The SWM committee may revise the new SWM plan based on comments received from one or more planning agencies.
- (c) The SWM committee shall submit the new SWM plan for adoption to the county commission of each county or to the governing body of the designated city participating in the plan. All supporting information required by K.S.A. 65-3405, and amendments thereto, and by K.A.R. 28-29-77, including planning agency reviews, shall be submitted with the new SWM plan.
- (d) Before adopting the new SWM plan, the county commission or governing body of a designated city shall hold a minimum of one public hearing on the plan. A notice of the public hearing, which shall specify the place and time of the hearing, shall be published at least once in the official newspaper of each county participating in the plan. The hearing shall be held at least 15 days and not more than 30 days after publication of the notice.
- (e) The county commission or governing body of a designated city shall inform the SWM committee of the adoption of the plan. (Authorized by K.S.A.65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-79. Approval of the SWM plan by the secretary.

- (a) After adoption of the SWM plan, the county commission, the governing body of the designated city, or the SWM committee shall submit the SWM plan to the secretary for consideration for approval as specified in K.S.A. 65-3405, and amendments thereto.
- (b) The following documents shall accompany the SWM plan:
 - (1) A review from each official land-use planning agency and each official comprehensive planning agency within the area covered by the SWM plan; and
 - (2) a certification of adoption from the county commission of each county covered by the SWM plan.
- (c) If an SWM plan is disapproved by the secretary, the county commission, governing body of the designated city, or SWM committee may revise and resubmit the SWM plan to the secretary. The revisions shall be

made according to K.A.R. 28-29-82. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-80. Annual reviews of the SWM plan.

(a) Review.

- (1) Each SWM committee, except as specified in K.S.A. 65-3405 and amendments thereto, shall conduct an annual review of the SWM plan.
- (2) The review shall identify all changes made to the SWM system of the county or region since adoption and approval of the SWM plan, the last annual update, or the last five-year review, whichever is most recent.

(b) Revision. If a revision of the SWM plan is required, the SWM committee, except as specified in K.S.A. 65-3405 and amendments thereto, shall follow the procedures specified in K.A.R. 28-29-82.

(c) Adoption. The county commission or governing body of the designated city shall inform the SWM committee of the adoption of the review.

(d) Submission.

- (1) The results of the annual review shall be submitted to the secretary on or before the anniversary date of approval of the SWM plan or the last five-year review, whichever is more recent.
- (2) One of the following groups shall submit the results of the annual review to the department:
 - (A) For individual county SWM plans without a designated city, the county commission;
 - (B) for SWM plans with a designated city, the governing body of the designated city; or
 - (C) for regional SWM plans, the SWM committee.
- (3) The following documents shall be submitted to the department with the results of the annual review:
 - (A) A list of the current SWM committee members, as specified in K.A.R. 28-29-76; and
 - (B) a certification of adoption from the county commission of each county participating in the SWM plan. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-81. Five-year reviews of the SWM plan.

(a) Review and revision. Each SWM committee shall review and revise the SWM plan within five years of the original SWM plan approval date or within five years of the previous five-year review approval date, whichever is more recent.

- (1) The revision shall include, at a minimum, updates of the 10-year projections for SWM practices and needs and shall contain any changes in the SWM system according to the requirements specified in K.A.R. 28-29-77.
- (2) The SWM committee shall revise the SWM plan according to the procedures specified in K.A.R. 28-29-82.

(b) Public hearing. One of the county commissions participating in the plan or the governing body of the designated city shall hold a public hearing in accordance with K.S.A. 65-3405 and amendments thereto.

- (1) A notice of the public hearing, specifying the place and time of the hearing, shall be published at least once in the official newspaper of each designated city and each county participating in the plan.
- (2) The hearing shall be held at least 15 days and not more than 30 days after publication of the notice.
- (3) Any county commission or governing body of the designated city participating in the plan may hold additional public hearings.

(c) Submission of the SWM plan. Pursuant to K.S.A. 65-3405 and amendments thereto, one of the following shall submit the revised SWM plan to the secretary on or before the five-year anniversary date of approval of the SWM plan or the last five-year review, whichever is more recent:

- (1) The county commission;
- (2) the governing body of the designated city; or
- (3) the SWM committee. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-82. Revisions to the SWM plan.

- (a) Each SWM committee shall revise the SWM plan if any of the following conditions is met:
- (1) A waste management activity that is specifically required or precluded under the current SWM plan is proposed to be changed.
 - (2) Any of the following waste management activities has occurred:
 - (A) The availability of waste collection services within the planning area has been reduced or expanded for some or all waste generators.
 - (B) A solid waste facility that is subject to permitting requirements under K.S.A. 65-3407, and amendments thereto, has been added or eliminated.
 - (C) Non-permitted recycling services have been added or eliminated.
 - (3) One or more counties have been added to the plan.
 - (4) One or more counties have withdrawn from the plan.
 - (5) A change to the implementation schedule or financing methods specified in the SWM plan has occurred or will occur.
 - (6) Revisions are required as part of the five-year review to extend the planning horizon to 10 years.
- (b) If the approved SWM plan does not meet the requirements of the solid waste management statutes or regulations, or both, a revision of the approved SWM plan may be required by the secretary. If a revision is required, written notice shall be provided by the secretary to each county commission, or the governing body of the designated city, covered by the SWM plan.
- (c) Each revised SWM plan shall be reviewed by the official land-use planning agency and each official comprehensive planning agency within the area covered by the SWM plan.
- (d) Each revised SWM plan shall be adopted according to the procedures specified in K.A.R. 28-29-78(b) and (d), except for regional SWM plans revised at unscheduled intervals, which shall be adopted in accordance with K.S.A. 65-3405 and amendments thereto. Adoption of the revised SWM plan by the county commission or commissions shall be conducted in an open meeting and shall provide an opportunity for public input.
- (e) The county commission, the governing body of the designated city, or the SWM committee shall submit the revised SWM plan to the secretary for consideration for approval in accordance with K.A.R. 28-29-79.
- (f) The county commission, or the governing body of the designated city, shall ensure that approved revisions of the SWM plan are incorporated in public copies of the plan maintained in accordance with K.A.R. 28-29-77. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-83. (Authorized by K.S.A. 1978 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked May 10, 1996.)

FINANCIAL REQUIREMENTS

28-29-84. Permit renewal; solid waste permit fees.

- (a) **General provisions.** Each permit issued by the department for any solid waste disposal facility or area, processing facility, incinerator, transfer station, composting plant or area and reclamation facility may be renewed on or before the anniversary date of the permit each year in the following manner:
- (1) Each solid waste facility operating in Kansas pursuant to a valid existing permit shall submit to the department, on or before the anniversary date of the permit, a report of the permitted activities on forms provided by the department.
 - (2) The annual permit renewal fee shall accompany the report. Action to approve the renewal of the permit shall not begin until such time as a properly completed report and the appropriate annual permit renewal fee are received by the department.
- (b) **Failure to submit.** Failure to submit a complete annual report and the annual permit renewal fee on or before the anniversary date of the permit each year may subject the permit holder to denial, revocation, or suspension of the permit.

(c) **Fee schedule.** The fee for a permit to operate a solid waste disposal area or facility will be as follows.

(1) The fee for an application for a proposed facility for which no permit has previously been issued by the department, or for reapplication due to loss of the permit resulting from departmental action, including revocation, denial or suspension shall be:

Incinerator	\$5,000.00
Industrial solid waste disposal area.....	\$3,000.00
Municipal solid waste disposal area	\$5,000.00
Processing facility	\$2,000.00
Reclamation facility	\$2,000.00
Solid waste compost facility	\$250.00
Transfer station	\$1,000.00

(2) Each facility or disposal area operating pursuant to a valid, current permit issued by department shall be required to pay an annual permit renewal fee. The annual permit renewal fees shall be:

Incinerator	\$1,000.00
Industrial solid waste disposal area.....	\$1,000.00
Municipal solid waste disposal area	\$2,000.00
Processing facility	\$1,000.00
Reclamation facility	\$1,000.00
Solid waste compost facility	\$250.00
Transfer station	\$500.00

(d) **Construction and demolition landfills.**

(1) The fee for an application for a proposed construction and demolition disposal facility for which no permit has previously been issued by the department or as otherwise set forth in these regulations shall be as follows:

- (A) each facility whose permit application projects receipt of less than 1,000 tons annually: \$250.00;
- (B) each facility whose permit application projects receipt of more than 1,000 and less than 10,000 tons annually: \$500.00; and
- (C) each facility operating whose permit application projects receipt of more than 10,000 tons annually: \$1,000.00.

(2) Each facility operating pursuant to a valid, current permit issued by the department shall be required to pay an annual permit renewal fee. The annual permit renewal fee shall be as follows:

- (A) for each facility receiving less than 1,000 tons annually: \$125.00;
- (B) for each facility receiving more than 1,000 and less than 10,000 tons annually: \$250.00; and
- (C) for each facility receiving more than 10,000 tons annually: \$500.00.

(3) Fees for each facility reapplying for a permit due to loss of the permit resulting from departmental action, including revocation, denial or suspension shall be determined in accordance with paragraph (d)(1) of this regulation based on the tonnage received the 12 months prior to the revocation, denial or suspension of the permit.

(4) To determine the annual fee due, the construction and demolition disposal facility may determine the volume of waste received during the previous year and convert this volume to an equivalent weight basis using the following conversion factor: 1 cubic yard = 1,250 pounds.

(e) **Multiple activities.** Any person conducting more than one of the activities listed in K.A.R. 28-29-84(c)(1) at one location shall pay a single fee. This fee shall be in the amount specified for the activity having the highest fee of those conducted. (Authorized by K.S.A. 1993 Supp. 65-3406, as amended by L. 1994, Ch. 283, sec. 2; implementing K.S.A. 1993 Supp. 65-3407, as amended by L. 1994, Ch. 283, sec. 3; effective, T-28-3-15-93, March 15, 1993; effective May 17, 1993; amended Aug. 28, 1995.)

28-29-85. State solid waste tonnage fees.

(a) **General provisions.** The operator of each solid waste disposal area in Kansas shall pay to the department a tonnage fee for each ton or equivalent volume of solid waste received and disposed of at the facility during the preceding reporting period. The fee shall be paid each reporting period until the facility no longer

receives waste and begins departmentally approved closure activities. Municipal solid waste disposal areas receiving 50,000 tons or more of solid waste annually shall file the reports required by subsection (b) of this regulation and pay their tonnage fee monthly, on or before the last day of the following month. Municipal solid waste disposal areas receiving less than 50,000 tons of solid waste annually, and all other solid waste disposal areas shall file reports and pay their tonnage fee quarterly, on or before the last day of April, July, October and January.

(b) Certification and late fees. The operator of each solid waste disposal area shall certify, on a form provided by the department, the amount, source and type of solid waste received, processed, recycled, and disposed of during the preceding reporting period. Any operator failing to remit the appropriate tonnage fee and submit the report within 45 days after each reporting period shall pay a late processing fee of one and one-half percent per month on the unpaid balance from the date the fee was due until paid.

(c) Determination of waste tonnages.

(1) Operator estimates. The operator of each municipal solid waste disposal area that receives 50,000 tons or more of solid waste annually shall use actual weight records. The operator of each municipal solid waste disposal area that receives less than 50,000 tons of solid waste annually shall, subject to department approval, use one of the following methods for determining the number of tons of waste disposed of at the solid waste disposal area.

(A) The operator may use actual weight records.

(B) The operator may use actual volume records based upon direct aerial and field survey techniques, using the conversion factor of 1,000 pounds per cubic yard less a department approved deduction for cover material.

(C) The operator may use actual volume records based upon daily logs which record the source, type and measurement or estimate of each load using the conversion factors as specified in subsection (d) of this regulation.

(D) The operator of a landfill serving one county or an identifiable population of less than 20,000 may use a per capita waste generation rate charge equivalent of .8 ton per person per year. This generation rate may only be used during calendar year 1993. This method may be used after December 31, 1993, only with specific departmental approval.

(2) Other disposal site estimates. All other solid waste disposal sites shall, subject to departmental approval, use the method provided in paragraph (c)(1)(A), (c)(1)(B) or (c)(1)(C) of this regulation.

(3) Departmental estimates. The department may estimate the number of tons received at a solid waste disposal area. The estimate may be based upon the number of tons received and reported for the previous reporting period, or any other recognized method.

(d) Payment calculation. The solid waste tonnage fee of \$1.50 per ton shall be calculated on department forms.

[Note: the tonnage fee is set by K.S.A. 65-3415b. At the time of printing it is \$1.00/ton.] If volume records are used, the following volume to weight factors shall be used to calculate tonnage unless the operator demonstrates to the department that a different conversion factor is appropriate.

Municipal Solid Waste (as delivered)

Residential/commercial

loose 325 pounds/cubic yard

compacted 650 pounds/cubic yard

Industrial

General 330 pounds/cubic yard

liquids/sludges 8.3 pounds/gallon

Construction demolition 1,250 pounds/cubic yard

(e) Exemptions. The state solid waste tonnage fee shall not apply to non-hazardous waste that is received at a solid waste disposal area, and recycled, reclaimed or reused. Such items include scrap and composted wastes. (Authorized by K.S.A. 1993 Supp. 65-3406, as amended by L. 1994, Ch 283, sec. 2; implementing

K.S.A. 1993 Supp. 65-3415b; effective, T-28-3-15-93, March 15, 1993; effective May 17, 1993; amended Aug. 28, 1995.)

28-29-98. Revoked. (Authorized by K.S.A. 1997 Supp. 65-3406; implementing K.S.A. 1997 Supp. 65-3401; effective, T-28-9-30-93, Sept. 30, 1993; effective Nov. 22, 1993; amended May 16, 1994; amended Aug. 22, 1994; amended April 9, 1996; amended April 9, 1997; amended July 24, 1998; revoked February 24, 2000.)

28-29-99. Revoked. (Authorized by K.S.A. 65-3406; amended by L. 1993, Ch. 274, Sec. 2; implementing K.S.A. 65-3401; effective, T-28-9-30-93, Sept. 30, 1993; effective Nov.22, 1993; revoked May 16, 1994; revoked Aug. 22, 1994.)

REGULATIONS FOR LOCATION, OPERATION, DESIGN, GROUNDWATER MONITORING, AND CLOSURE/POST-CLOSURE OF MUNICIPAL SOLID WASTE LANDFILLS

28-29-100. Applicability.

- (a) The provisions of K.A.R. 28-29-100 through K.A.R. 28-29-121 shall apply to all municipal solid waste landfills receiving waste on or after October 9, 1991. Facilities receiving waste after October 9, 1991, but that stop receiving waste before October 9, 1993 shall only be subject to the final cover requirements in K.A.R. 28-29-121.
- (b) Each existing unit or lateral expansion receiving flood-related waste from federally-designated areas within the major disaster areas declared by the president during the summer, of 1993 pursuant to 42 U.S.C. 5121 *et seq.*, shall be designated by the director of the division of environment in accordance with the following:
 - (1) If it is determined by the director of the division of environment that a unit is needed to receive flood-related waste from a federally-designated disaster area, as specified in this regulation, that unit may continue to accept waste prior to April 9, 1994 without being subject to the requirements of K.A.R. 28-29-100 through K.A.R. 28-29-121, except as provided in subsection (a) of this regulation.
 - (2) Any unit that receives an extension in accordance with paragraph (b)(1) of this regulation may continue to accept waste for a maximum of six additional months beyond April 9, 1994 without being subject to the requirements of K.A.R. 28-29-101 through K.A.R. 28-29-121, except as provided in subsection (a) of this regulation, if it is determined by the director of the division of environment that the unit is still needed to receive flood-related waste from a federally-designated disaster area as specified in this regulation.
 - (3) Any unit receiving an extension under paragraphs (b)(1) or (b)(2) of this regulation which accepts waste under any circumstances on or after October 9, 1994 shall be subject to K.A.R. 28-29-101 through K.A.R. 28-29-121.
- (c) Any unit that meets the small landfill requirements of K.A.R. 28-29-103 may accept waste on or before October 9, 1997 without being subject to the requirements of K.A.R. 28-29-100 through K.A.R. 28-29-121, except as provided in subsection (a) of this regulation.
- (d) Any portions of K.A.R. 28-29-101 through 28-29-121 which contain requirements different from those contained in K.A.R. 28-29-23 shall supersede the requirements of K.A.R. 28-29-23. (Authorized by K.S.A. 1995 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994; amended Dec. 13, 1996.)

28-29-101. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994; revoked May 30, 2003.)

28-29-102. Location restrictions.

(a) Airport safety.

- (1) Each owner or operator of a new MSWLF unit and existing MSWLF unit which is located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft, shall demonstrate to the department that the unit is designed and, operated so that the unit does not pose a bird hazard to aircraft.

- (2) Each owner or operator proposing to site a new unit within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft shall notify the affected airport and the federal aviation administration (FAA).
- (3) The owner or operator shall place a copy of the demonstration in the operating record.
- (4) For purposes of this subsection:
 - (A) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.
 - (B) "Bird hazard" means an increase in the likelihood of bird and aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(b) Floodplains.

- (1) Owners or operators of new MSWLF units and existing MSWLF units located in 100-year floodplains must demonstrate to the department that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.
- (2) The owner or operator shall place a copy of the demonstration in the operating record.
- (3) For purpose of this subsection:
 - (A) "Floodplain" means the lowland and relatively flat areas adjoining inland waters, including flood-prone areas that are inundated by the 100-year flood.
 - (B) "100-year flood" means a flood that has a 1% or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.
 - (C) "Washout" means the carrying away of solid waste by waters of the base flood.

(c) Wetlands.

- (1) New MSWLF units shall not be located in wetlands, unless the owner or operator demonstrates to the department that:
 - (A) there is no practicable alternative to the proposed MSWLF that does not also involve wetlands;
 - (B) the construction and operation of the unit will not:
 - (i) cause or contribute to violations of any applicable Kansas water quality standard;
 - (ii) violate any applicable toxic effluent standard prohibition under section 307 of the clean water act, 33 U.S.C. 1317;
 - (iii) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the endangered species act of 1973; and
 - (iv) violate any requirement under the marine protection, research, and sanctuaries act of 1972 for the protection of a marine sanctuary;
 - (C) the unit will not cause or contribute to significant degradation of wetlands. The owner or operator shall demonstrate the integrity of the unit and its ability to protect ecological resources by addressing the following factors:
 - (i) erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the unit;
 - (ii) erosion, stability, and migration potential, of dredged and fill materials used to support the unit;
 - (iii) the volume and chemical nature of the waste managed in the unit;
 - (iv) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;
 - (v) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and
 - (vi) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;
 - (D) steps have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by first avoiding impacts to wetlands to the maximum extent practicable, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining

unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions, including restoration of existing degraded wetlands or creation of man-made wetlands; and (E) sufficient information is available to make a reasonable determination with respect to these demonstrations.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For purposes of this subsection, "wetlands" means those areas that meet the definition provided in the "Corps of Engineers Wetland Delineation Manual Technical Report Y-87-1," as published January, 1987 by the Department of the Army Waterways Experiment Station, Corps of Engineers.

(d) Fault areas.

(1) New MSWLF units shall not be located within 60 meters (200 feet) of a fault that has had displacement in holocene time unless the owner or operator demonstrates to the department that an alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the unit and will be protective of human health and the environment.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For the purposes of this subsection:

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

(B) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(C) "Holocene" means the most recent epoch of the quaternary period, extending from the end of the pleistocene epoch to the present.

(e) Seismic impact zones.

(1) New MSWLF units shall not be located in seismic impact zones, unless the owner or operator demonstrates to the department that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For the purpose of this subsection the following definitions shall apply:

(A) "Seismic impact zone" means an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.

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

(C) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates, or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term shall not include human-made materials, including fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(f) Unstable areas.

(1) Owners or operators of new MSWLF units and existing units located in an unstable area shall demonstrate to the department that engineering measures have been incorporated into the unit's design to ensure that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

(A) on-site or local soil conditions that may result in significant differential settling;

(B) on-site or local geologic or geomorphologic features; and

(C) on-site or local human-made features or events both surface and subsurface.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For purposes of this subsection:

- (A) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the MSWLF structural components responsible for preventing releases from a landfill. Unstable areas may include poor foundation conditions, areas susceptible to mass movements, and karst terrains.
- (B) "Structural components" means liners, leachate collection systems, final covers, run-on systems, run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment.
- (C) "Poor foundation conditions" means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of an MSWLF unit.
- (D) "Areas susceptible to mass movement" means those areas of influence including areas characterized as having an active or substantial possibility of mass movement, where the movement of earth material at, beneath, or adjacent to the MSWLF unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement may include:
 - (i) landslides;
 - (ii) avalanches;
 - (iii) debris slides and flows;
 - (iv) soil fluction;
 - (v) block sliding; and
 - (vi) rock fall.
- (E) "Karst terrains" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains may include:
 - (i) sinkholes;
 - (ii) sinking streams;
 - (iii) caves;
 - (iv) large springs; and
 - (v) blind valleys.

(g) Closure of existing MSWLF units.

- (1) Existing units that cannot make the demonstration pertaining to airports, floodplains, or unstable areas, shall close by October 9, 1996, in accordance with K.A.R. 28-29-121 and conduct post-closure activities in accordance with K.A.R. 28-29-121.
- (2) The deadline for closure required by subsection (g)(1) may be extended up to two years if the owner or operator demonstrates to the department that there is no:
 - (A) available alternative disposal capacity; and
 - (B) immediate threat to human health and the environment.

(h) Kansas historic preservation act. Each new MSWLF unit shall be located so as not to pose a threat of harm or destruction to the essential features of an irreplaceable historic or archaeological site that is listed pursuant to the Kansas historic preservation act, K.S.A. 75-2716 and 75-2724.

(i) Endangered species conservation act. Each new MSWLF unit shall be located so as not to:

- (1) jeopardize the continued existence of any designated endangered species;
- (2) result in the destruction or adverse modification of the critical habitat listed for such species; or
- (3) cause or contribute to the taking of any endangered or threatened species of plant, fish or wildlife listed pursuant to the endangered species act 16 U.S.C. 1531 et seq., or Kansas non-game and endangered species conservation act, K.S.A. 32-957 et seq., and, K.S.A. 32-1009 et seq.

(j) Buffer zones.

- (1) No part of a newly permitted MSWLF unit shall be located closer than 152 meters (500 feet) from an occupied dwelling, school, or hospital that was occupied on the date when the owner or operator first applied for a permit to develop the unit of the facility containing the unit, unless the owner of such dwelling, school, or hospital consents in writing.

- (2) All newly permitted MSWLF units shall maintain a minimum 46 meters (150 feet) buffer from the edge of the planned MSWLF unit to the owner's or operator's property line.
- (3) The owner or operator may petition the director for a reduction in the buffer zone distances, provided the county commission of the county in which the landfill is located approves the request.

(k) Navigable streams.

- (1) A new MSWLF unit shall not be located within one-half mile of a navigable stream used for interstate commerce.
- (2) For purposes of this subsection, "navigable stream" means any water defined as navigable water of the United States under 33 CFR Part 329 as in effect on July 1, 1993.
- (3) The provisions of this subsection shall not apply to:
 - (A) lateral expansion onto land contiguous to a permitted MSWLF in operation on July 1, 1991; or
 - (B) renewal of an existing permit for a permitted MSWLF on July 1, 1991.

(l) Public drinking water supplies.

- (1) No new MSWLF shall be located within one mile of a surface water intake source for a public water supply system.
- (2) For purposes of this subsection:
 - (A) "Surface water" means any water defined under ~~K.A.R. 28-15-11~~ K.A.R. 28-16-28b(fff). [*Note: modified by 28-29-1a*]
 - (B) "Public water supply system" means any system defined under ~~K.A.R. 28-15-11~~ K.S.A. 65-162a and amendments thereto. [*Note: modified by 28-29-1a*] (Authorized by K.S.A.1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-103. Small landfills.

- (a) Any owner or operator of a new or existing municipal landfill may request an exemption from the design requirements in K.A.R. 28-29-104, as amended, if these conditions are met:
 - (1) the MSWLF receives and disposes of less than 20 tons of municipal solid waste daily, based on an annual average;
 - (2) there is no evidence of groundwater contamination from the MSWLF;
 - (3) the MSWLF is in an area that annually receives less than or equal to 25 inches of precipitation; and
 - (4) the community or communities utilizing the MSWLF have no practicable waste management alternative.
- (b) Each owner or operator requesting the small landfill exemption shall demonstrate compliance with the conditions in subsection (a) by submitting the following documentation to the department for review and approval:
 - (1) actual records of past operations or estimates of the amount of solid waste disposed on a daily basis to demonstrate that the MSWLF meets the condition in paragraph (a)(1);
 - (2) site-specific data demonstrating that the MSWLF meets the condition in paragraph (a)(2);
 - (3) climatic data obtained for a minimum 30-year averaging period demonstrating that the MSWLF meets the condition in paragraph (a)(3); and
 - (4) one of the following statements to demonstrate that the MSWLF meets the condition in paragraph (a)(4):
 - (A) a statement containing data showing to the department that the closest MSWLF is more than 75 miles away; or
 - (B) written certification, from the board of county commissioners in the county where the landfill is located, that a landfill located less than 75 miles away is not a practicable alternative.
- (c) The owner or operator of each small landfill meeting the exemption criteria shall comply with the location restrictions, the operating standards, the closure and post-closure standards, and the financial assurance standards for municipal solid waste landfills.
 - (1) Each "existing small landfill" for the purposes of K.A.R. 28-29-103, as amended, means any area permitted for municipal solid waste disposal on or before October 9, 1993 and any area permitted for municipal solid waste disposal through a permit amendment prior to October 9, 1997 and contiguous to the area permitted before October 9, 1993.

- (2) Each “new small landfill” means any area not permitted for municipal solid waste disposal prior to October 9, 1993 or not incorporated into an existing permit by amendment prior to October 9, 1997.
- (d) Each existing small landfill meeting the exemption criteria in subsection (a) and receiving waste on or after October 9, 1997 shall comply with subsection (f), (g) or (h) of this regulation in order to demonstrate that naturally occurring geological conditions provide sufficient protection against groundwater contamination.
- (e) Each new small landfill or unit meeting the exemption criteria in subsection (a) shall comply with subsection (f) of this regulation and shall be constructed with the following:
- (1) a liner consisting of the following:
 - (A) a minimum of two feet of compacted clay with a hydraulic conductivity of no more than 1×10^{-6} cm/sec; and
 - (B) a leachate collection system; or
 - (2) *in situ* material or an alternate, approved constructed liner meeting the demonstration standards for groundwater modeling prescribed in subsection (g) or the liner performance standard prescribed in subsection (h) of this regulation. Alternate constructed liners shall be considered for approval by the department when these conditions are met:
 - (A) the technology or material has been successfully utilized in at least one application similar to the proposed application;
 - (B) methods for ensuring quality control during the manufacture and construction of the liner can be implemented; and
 - (C) the owner or operator can provide documentation in the operating record that the provisions set forth in this subsection have been satisfied.
- (f) Groundwater monitoring, sampling, and analysis.
- (1) The owner or operator of each landfill meeting the exemption criteria shall install a groundwater monitoring system developed by a qualified groundwater scientist as defined in K.A.R. 28-29-111 and approved by the department. The groundwater monitoring system shall fulfill these requirements:
 - (A) have monitoring wells located on the property permitted for solid waste disposal, and yield groundwater samples from the uppermost aquifer representing the quality of groundwater passing the point of compliance as defined by K.A.R. 28-29-101(aa), as amended;
 - (B) consist of a sufficient number of wells to accurately determine the groundwater flow gradient, including a minimum of two down gradient wells;
 - (C) have monitoring wells located at a distance no greater than 150 meters or 492 feet from the planned edge of the unit; and
 - (D) have monitoring wells located at least 50 feet from the property boundary for all new small landfills. The “upper most aquifer,” for the purposes of K.A.R. 28-29-103, as amended, means the first saturated zone able to fully recharge within 24 hours after one well volume is removed.
 - (2) The owner or operator of each small landfill meeting the exemption criteria shall maintain and operate the monitoring system in accordance with K.A.R. 28-29-111, paragraphs (f)(2) and (f)(3), as amended.
 - (3) The owner or operator of each small landfill meeting the exemption criteria shall perform the following:
 - (A) sample each down gradient monitoring well semiannually during the active site life and post-closure period to ensure that contaminate levels are within the parameters listed in Table 1 of this regulation;
 - (B) measure the water depth in all monitoring wells during the semiannual sampling to verify the groundwater flow gradient; and
 - (C) submit the results of analytical testing and verification of the groundwater flow gradient to the department within 45 days of receipt of the test results.

TABLE 1
Monitoring Constituents for Exempt Small Landfills

Constituent	Maximum Contaminant Level(MCL) (in milligrams per liter mg/l)	Constituent	Maximum Contaminant Level(MCL) (in milligrams per liter mg/l)
VOLATILE ORGANIC COMPOUNDS		METALS (dissolved)	
Benzene	0.005	Cadmium	0.005
1,2-Dichloroethane	0.005	Chromium (total).....	0.05
1,1-Dichloroethene	0.007		
1,2-Dichloropropane.....	0.005		
Ethylbenzene	0.7		
Styrene.....	0.1		
Tetrachloroethene	0.005		
Toluene.....	1.0		
1,1,1-Trichloroethane	0.2		
Trichloroethene	0.005		
Vinyl Chloride.....	0.002		
Total Xylenes	10.0		

- (4) If the owner or operator of any existing small landfill demonstrates that naturally occurring geological conditions provide sufficient protection against groundwater contamination by compliance with subsection (g) or subsection (h) of this regulation, the owner or operator may reduce the sampling frequency established in paragraph (f)(3) from semiannual samples to annual samples.
- (5) The groundwater monitoring program shall include consistent sampling and analysis procedures in accordance with K.A.R. 28-29-112, subsections (a), (b)(1) through (b)(4), (c), and (d), as amended.
- (6) If any monitoring well exceeds the maximum contaminant level of any constituent listed in Table 1 in subsection (f) of this regulation, the owner or operator shall sample the well again, within 30 calendar days of the finding. If the second sample confirms that contamination levels exceed the maximum contaminant level of any constituent listed in Table 1, the exempt status of the landfill shall be revoked, and the owner or operator shall comply with K.A.R. 28-29-104 and K.A.R. 28-29-110 through 28-29-114, as amended.
- (7) The groundwater sampling and analysis requirements of subsection (f) of this regulation may be suspended by the department at existing small landfills if the owner or operator demonstrates the following:
 - (A) naturally occurring geological conditions provide sufficient protection against groundwater contamination as evidenced by compliance with subsection (g) or (h) of this regulation;
 - (B) the uppermost aquifer does not exist within a depth of 150 feet below the lowest depth of the municipal solid waste; and
 - (C) no potential for migration of hazardous constituents exists from that MSWLF unit to the uppermost aquifer during the active life of the unit and the post-closure care period. This demonstration shall be certified by a qualified groundwater scientist and approved by the department.
- (8) The groundwater monitoring, sampling, and analysis required in subsection (f) of this regulation may be reduced or suspended by the department based on site-specific data.

(g) Groundwater modeling.

- (1) Each owner or operator of a small landfill meeting the exemption criteria shall demonstrate that a constructed liner at the site or naturally occurring strata prohibit contaminants from exceeding the concentration values listed in Table 1 of K.A.R. 28-29-104, subsection (e), as amended, in the uppermost aquifer at the point of compliance based on fate and transport modeling of predicted landfill leachate. The point of compliance shall be located as follows:
 - (A) within 150 meters or 492 feet of the edge of the planned unit boundary; and
 - (B) on the owner's or operator's property.

- (2) When approving modeling demonstrations, the following factors may be considered by the department:
 - (A) the hydrogeologic characteristics of the facility and surrounding land;
 - (B) the climatic factors of the area; and
 - (C) the volume and physical and chemical characteristics of the leachate. The expected performance of the design shall be evaluated at maximum annual leachate flow conditions.
- (3) Each model demonstration developed pursuant to subsection (g)(1) of this regulation shall be certified by a qualified groundwater scientist.
- (4) Each owner or operator of a small landfill performing the groundwater modeling demonstration shall comply with the groundwater monitoring, sampling, and analysis requirements prescribed in subsection (f).

(h) Liner performance standard.

- (1) Each owner or operator shall demonstrate that *in situ* material meets the liner performance standard by submitting the following information for each small landfill unit:
 - (A) certification from a professional engineer licensed in Kansas that the *in situ* material immediately below the bottom of the municipal solid waste layer but prior to encountering groundwater meets these conditions:
 - (i) has a permeability equivalent to two feet of 1×10^{-6} cm/sec material; and
 - (ii) within the equivalently permeable layer, has no soil layer or stratum with a permeability greater than 1×10^{-4} cm/sec and with sufficient continuity and thickness to allow groundwater to flow laterally off the owner's property; and
 - (iii) shows consistency in all boring data.
 - (B) data from a minimum of one centrally located boring that provides a soil profile to a depth of the following:
 - (i) the water table;
 - (ii) 46 meters or 150 feet; or
 - (iii) a point where a minimum of 10 feet of 1×10^{-9} cm/sec material is encountered;
 - (C) data from a minimum of four additional borings of sufficient depths to provide data supporting the certification in paragraph (h)(1)(A) of this regulation;
 - (D) laboratory soil or field permeability data sufficient to provide data supporting the certification in paragraph (h)(1)(A) of this regulation; and
 - (E) evidence that the highest water table of any underlying groundwater is a minimum of 1.5 meters or five feet below the bottom of the material used to make the demonstration that the *in situ* material meets the liner performance standard.
- (2) When approving a liner demonstration for compliance with this subsection, the following minimum factors shall be considered by the department:
 - (A) the hydrogeologic characteristics of the facility and surrounding land;
 - (B) the climatic characteristics of the area; and
 - (C) the volume and physical and chemical characteristics of the leachate.
- (3) Each owner or operator demonstrating the liner performance standard shall comply with the groundwater monitoring, sampling, and analysis requirements prescribed in subsection (f).
- (i) Each owner or operator shall document in the operating record that the small landfill unit meets the requirements in subsection (f), (g) or (h) of this regulation. (Authorized by K.S.A. 1995 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994; amended Dec. 13, 1996.)

28-29-104. Design standards.

(a) General design standards.

- (1) Existing units. Any portion of a trench or area of an existing unit not filled to its permitted design capacity by October 9, 1996, shall be considered a vertical expansion subject to the standards in K.A.R. 28-29-104(a)(2), or a new unit subject to the standards in K.A.R. 28-29-104(a)(3).
- (2) Vertical expansions.

- (A) Any proposed vertical expansion shall be considered a significant modification to the facility and subject to permit modification procedural requirements.
- (B) Any proposed vertical expansion shall meet the following requirements, in addition to any other applicable MSWLF regulations.
 - (i) A hydrogeologic site assessment shall be conducted in compliance with K.A.R. 28-29-104(b).
 - (ii) A groundwater monitoring well system shall be in place, pursuant to K.A.R. 28-29-111.
 - (iii) The owner or operator shall operate the landfill in a manner that minimizes leachate generation.
 - (iv) If groundwater contamination is detected, the owner or operator of the proposed vertical expansion shall initiate an assessment of corrective measures, pursuant to K.A.R. 28-29-114(a)(1).
 - (v) The final cover design shall meet the requirements of K.A.R. 28-29-121(e)(1).
 - (vi) Local planning and zoning approval shall be obtained from the appropriate jurisdictional body.
 - (vii) The owner or operator shall secure certification from the board of county commissioners that the vertical expansion is in conformance with the official county or regional solid waste management plan.
- (C) A vertical expansion over a closed unit which has received final cover shall be classified as a new unit, and therefore subject to the design standards for new units.
- (D) In evaluating a proposed vertical expansion, the department shall consider the following factors:
 - (i) The impact of the proposed vertical expansion on human health and the environment rather than other alternatives, including a new unit;
 - (ii) the capacity needs of the community or communities and the region using the landfill;
 - (iii) the proposed operating life of the vertical expansion; and
 - (iv) the inclusion or exclusion of the landfill in a regional solid waste management plan.
- (E) The expiration date for a permit modified to allow for a vertical expansion shall not exceed five years from the date the modified permit is issued. At the end of the initial five year period, and any subsequent five year period, the owner may submit a request for an additional five-year permit. The request shall include an assessment of the environmental impact of the vertical expansion. Based on an evaluation of the environmental impact, the permit shall either be denied, or renewed for a period not to exceed five additional years by the director.

(3) New units.

- (A) All new units shall be equipped with a leachate drainage and collection system and liner designed as an integrated system in compliance with the requirements of this section.
- (B) The design period for new municipal landfills shall be the estimated operating life plus 30 years of post-closure care.

(b) Hydrogeologic site investigations.

- (1) The owner or operator of a proposed MSWLF unit shall conduct a hydrogeologic investigation to develop information for the following purposes:
 - (A) providing information to determine an appropriate design for the unit; and
 - (B) providing information to establish a groundwater monitoring system.
- (2) Prior to submitting an application to the department for a permit to develop and operate a MSWLF or to design a groundwater monitoring system, the hydrogeologic site investigation shall be conducted in a minimum of two phases, unless the department approves conducting the two phases concurrently.
 - (A) The purpose of the phased study shall be to allow for the consideration by the department of information gathered during phase I prior to proceeding with phase II.
 - (B) If the owner or operator of an existing MSWLF has already compiled sufficient data to fulfill the requirements of the hydrogeologic investigation, this information may be submitted to the department in lieu of conducting a new assessment.
- (3) For the purposes of the hydrogeologic investigation set forth in paragraph (b)(1), the area to be investigated shall consist of the entire area occupied by the facility and any adjacent areas, if necessary to fully characterize the site.

- (4) All borings shall be sampled continuously except where continuous sampling is impossible or where interval sampling or sampling at recognizable points of geologic variation will provide satisfactory information. Sampling intervals shall not exceed 1.52 vertical meters (5 feet).
- (5) The phase I hydrogeologic investigation shall consist of the following items.
- (A) A minimum of one continuously sampled boring shall be drilled on the site, as close as possible to the geographic center, to determine if available regional hydrogeologic setting information is accurate and to characterize the site-specific hydrogeology to the extent specified by this phase of the investigation. The boring shall extend to the bottom of the uppermost aquifer. This boring shall be constructed so that it will not provide a conduit for contaminant migration to a lower aquifer or formation.
 - (B) The following information shall be gathered by the owner or operator:
 - (i) climatic aspects of the study area;
 - (ii) the regional and study area geologic and hydrogeologic setting, including a description of the geomorphology and stratigraphy of the area and aquifer characteristics, including water table depths; and
 - (iii) any other information needed for the purpose of designing a phase II hydrogeologic investigation.
 - (C) The information from the phase I investigation shall be compiled in a report and submitted with evaluations and recommendations to the department for review and approval.
 - (D) The results and conclusions of the phase I report shall be certified by a qualified groundwater scientist.
- (6) The phase II hydrogeologic investigation shall consist of the following items.
- (A) One boring shall be located as close as possible to the topographical high point, and another shall be located as close as possible to the topographical low point of the study area.
 - (B) Additional borings shall be made in order to characterize the subsurface geology of the entire study area.
 - (C) Piezometers and groundwater monitoring wells shall be established to determine the direction and flow characteristics of the groundwater in all strata and extending down to the bottom of the uppermost aquifer. Groundwater samples taken from the monitoring wells shall be used to develop preliminary information needed for establishing background concentrations.
 - (D) The owner or operator shall gather the following site-specific information, as necessary, to augment the data collected during the phase I investigation:
 - (i) chemical and physical properties including, but not limited to, lithology, mineralogy, and hydraulic characteristics of underlying strata including those below the uppermost aquifer;
 - (ii) soil characteristics, including soil types, distribution, geochemical and geophysical characteristics;
 - (iii) hydraulic conductivities of the uppermost aquifer and all strata above it;
 - (iv) vertical extent of the uppermost aquifer;
 - (v) direction and rate of groundwater flow; and (vi) concentrations of chemical constituents present in the groundwater below the unit, down to the bottom of the uppermost aquifer, using a broad range of chemical analysis and detection procedures such as gas chromatographic and mass spectrometric scanning.
 - (E) The owner or operator shall evaluate the data gathered during the phase I and phase II investigations and prepare a report for submittal to the department that contains the following information:
 - (i) structural characteristics and distribution of underlying strata, including bedrock;
 - (ii) characterization of potential pathways for contaminant migration;
 - (iii) correlation of stratigraphic units between borings;
 - (iv) continuity of petrographic features including, but not limited to, sorting, grain size distribution, cementation and hydraulic conductivity;
 - (v) identification of the confining layer, if present;

- (vi) characterization of the seasonal and temporal, naturally and artificially induced, variations in groundwater quality and groundwater flow;
- (vii) identification of unusual or unpredicted geologic features, including fault zones, fracture traces, facies changes, solution channels, buried stream deposits, cross cutting structures and other geologic features that may affect the ability of the owner or operator to monitor the groundwater or predict the impact of the disposal facility on groundwater; and
- (viii) recommendations for landfill siting and conceptual design for the department to review and approve.

(F) The results and conclusions of the phase II report shall be certified by a qualified groundwater scientist.

(c) Foundation and mass stability analysis.

- (1) The material beneath the unit shall have sufficient strength to support the weight of the unit during all phases of construction and operation. The loads and loading rate shall not cause or contribute to the failure of the liner or leachate collection system.
- (2) The total settlement or swell of the foundation shall not cause or contribute to the failure of the liner or leachate collection system.
- (3) The solid waste disposal unit shall be designed to achieve a safety factor during the design period against bearing capacity failure of at least 2.0 under static conditions and 1.5 under seismic loadings.
- (4) The waste disposal unit shall be designed to achieve a factor of safety against slope failure during the design period of at least 1.5 for static conditions and 1.3 under seismic conditions.
- (5) The liner and leachate collection system shall be stable during all phases of construction and operation. The side slopes shall achieve a minimum static safety factor of 1.5 and a minimum seismic safety factor of 1.3 at all times.
- (6) In calculating factors of safety, both long term, in tens or hundreds of years, and short term, over the design period of the facility, conditions expected at the facility shall be considered.
- (7) The potential for earthquake or blast-induced liquefaction, and its effect on the stability, and integrity of the unit shall be considered and taken into account in the design. The potential for landslides or earthquake induced liquefaction outside the unit shall be considered if such events could affect the unit.

(d) Foundation construction.

- (1) If the *in situ* material provides insufficient strength to meet the requirements of subsection (c), then the insufficient material shall be removed and replaced with clean materials sufficient to meet the requirements of subsection (c).
- (2) All trees, stumps, roots, boulders and debris shall be removed.
- (3) All material shall be compacted to achieve the strength and density properties necessary to demonstrate compliance with this part.
- (4) Placement of frozen soil or soil onto frozen ground shall be prohibited.
- (5) The foundation shall be constructed and graded to provide a smooth, workable surface on which to construct the liner.

(e) Liner standards.

- (1) New MSWLF units shall be constructed:
 - (A) with a composite liner and a leachate collection system that is designed and constructed in accordance with subsections (g), (h), and (i). For purposes of this regulation, "composite liner" means a system consisting of two components. The upper component shall consist of a minimum 30-mil geomembrane, the lower component shall consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. Geomembrane components consisting of high density polyethylene (HDPE) shall be at least 60-mil thick. The geomembrane component shall be installed in direct and uniform contact with the compacted soil component in order to minimize the migration of leachate through the geomembrane should a break occur; or
 - (B) in accordance with an alternative design approved by the department. The design shall demonstrate that the concentration values listed in table 1 below will not be exceeded in the uppermost aquifer at the point of compliance. The point of compliance shall be within 150 meters (492) feet of the edge

of the planned unit boundary. In addition, the point of compliance shall be on the owner's or operator's property and shall be at least 15.24 meters (50 feet) from the property boundary.

- (2) When approving a design that complies with paragraph (1)(B), the department shall consider at least the following factors:
 - (A) the hydrogeologic characteristics of the facility and surrounding land;
 - (B) the climatic factors of the area; and
 - (C) the volume and physical and chemical characteristics of the leachate. The design's performance shall be evaluated at maximum annual leachate flow conditions.
- (3) Approval of alternate designs shall be considered by the department only when:
 - (A) the technology or material has been successfully utilized in at least one application similar to the proposed application; and
 - (B) methods for ensuring quality control during the manufacture and construction of the liner can be implemented.
- (4) The owner or operator shall document in the operating record that the liner meets the liner standards in K.A.R. 28-29-104(e)(1)(A) or (B).

TABLE 1 -- MAXIMUM CONTAMINANT LEVELS

<u>Chemical</u>	<u>MCL (mg/l)</u>	<u>Chemical</u>	<u>MCL (mg/l)</u>
Arsenic	0.05	Lead	0.05
Barium.....	1.0	Mercury.....	0.002
Benzene.....	0.005	Methoxychlor.....	0.1
Cadmium.....	0.005	Monochlorobenzene.....	0.1
Carbon tetrachloride.....	0.005	Nitrate	10
Chromium (hexavalent)	0.1	Nitrite	1.0
2,4-Dichlorophenoxy acetic acid	0.1	Total Nitrate/Nitrite	10
1,4-Dichlorobenzene	0.075	Selenium	0.05
1,2-Dichlorobenzene.....	0.6	Silver	0.05
1,2-Dichloroethane.....	0.005	Styrene	0.1
1,1-Dichloroethylene	0.007	Tetrachloroethylene	0.005
cis-1,2-Dichloroethylene.....	0.07	Toluene	1
trans-1,2-Dichloroethylene	0.1	Toxaphene.....	0.005
1,2 Dichloropropane	0.005	1,1,1-Trichloromethane.....	0.2
Endrin	0.0002	Trichloroethylene.....	0.005
Ethylbenzene.....	0.7	2,4,5-Trichlorophenoxy acetic acid	0.01
Fluoride	4	Vinyl Chloride	0.002
Lindane	0.004	Xylenes	10

(f) Liner construction.

- (1) The construction and compaction of the liner shall be carried out in accordance with the approved design to reduce void spaces and allow the liner to support the loadings imposed by the waste disposal operation without settling that causes, or contributes to the failure of the leachate collection system.
- (2) The liner shall be constructed from materials whose properties are not affected by contact with the constituents expected to be in leachate generated by the landfill.
- (3) Geomembrane liners shall be constructed in compliance with the following requirements.
 - (A) The geomembrane shall be supported by a compacted base free from sharp objects. The geomembrane shall be chemically compatible with the supporting soil materials.
 - (B) The geomembrane shall have sufficient strength and durability to function at the site for the design period under the maximum expected loadings imposed by the waste and equipment and stresses imposed by settlement, temperature, construction and operation.

(C) Seams shall be made in the field according to the manufacturer's specifications. All sections shall be arranged so that the use of field seams is minimized and seams are oriented in the direction subject to the least amount of stress where practical.

(D) The leachate collection system shall be designed to avoid loss of leachate through openings through the geomembrane.

(g) Leachate drainage system.

(1) The leachate drainage system shall be designed and constructed to operate for the entire design period.

(2) The system shall be designed in conjunction with the leachate collection system required by subsection (h):

(A) to maintain a maximum head of leachate 0.30 meter (one foot) above the liner; and

(B) to operate during the month when the highest average monthly precipitation occurs, and if the liner bottom is located within the saturated zone, under the condition that the groundwater table is at its seasonal high level.

(3) A drainage layer shall overlay the entire liner system. This drainage layer shall be no less than 0.30 meter (one foot) thick.

(4) The drainage layer shall be designed to maintain flow throughout the drainage layer under the conditions described in paragraph (g)(2) above.

(5) Materials used in the leachate drainage system shall be chemically resistant to the wastes and the leachate expected to be produced.

(h) Leachate collection system.

(1) The leachate collection system shall be designed and constructed to function for the entire design period. The leachate collection system shall consist of conduits including pipes, trenches, or a combination of pipes and trenches.

(2) Materials used in the leachate collection system shall be chemically resistant to the leachate expected to be produced.

(3) The leachate collection system shall be designed so that leachate drains freely from the collection conduits. If sumps are used, leachate shall be removed via gravity flow, whenever possible, before the level of leachate in the sumps rises above the invert of the collection conduits under the conditions established in paragraph (g)(2) above. If gravity flow is not possible, pumping may be utilized to remove leachate, but the use of pumps shall be minimized.

(4) Collection conduits shall be designed to capture leachate for open channel flow to convey leachate under the conditions established in paragraph (g)(2) above.

(5) Collection pipe conduits.

(A) Collection pipe shall be of a cross-sectional area that allows cleaning and at least 0.10 meter (four inches) nominal inside diameter.

(B) The collection pipe material and bedding materials as placed shall possess structural strength to support the maximum loads imposed by the overlaying materials and equipment used at the facility, as well as the effects of differential settling.

(C) Collection pipes shall be constructed within a coarse gravel envelope using a graded filter or geotextile as necessary to minimize clogging.

(D) The collection pipe system shall be equipped with a sufficient number of manholes and cleanout risers to allow cleaning and maintenance of all pipes throughout the design period.

(6) Trench conduits.

(A) Trench conduits shall be designed to minimize particulate and biological clogging.

(B) Trench conduits shall be constructed to minimize movement of drainage media when a load is placed on the media.

(i) Leachate treatment and disposal system.

(1) The owner or operator shall be responsible for the operation of a leachate management system designed to handle all leachate as it is removed from the collection system. The leachate management system shall consist of any combination of storage, treatment, pretreatment, and disposal options.

- (2) The leachate management system shall allow for the management and disposal of leachate during routine maintenance and repairs.
- (3) Standards for leachate storage systems.
 - (A) The leachate storage facility shall be capable of storing a minimum of five days' worth of accumulated leachate at the maximum generation rate used in designing the leachate drainage system in accordance with subsection (g) of this regulation.
 - (B) Each leachate storage facility shall be equipped with secondary containment systems equivalent to the protection provided by a clay liner 0.61 meter (two feet) thick, having a permeability no greater than 1×10^{-7} centimeters per second.
 - (C) Each leachate storage system shall be fabricated from material compatible with the leachate expected to be generated and resistant to temperature extremes.
 - (D) The leachate storage system shall be designed to minimize odors.
 - (E) The leachate drainage and collection system shall not be used for the purpose of storing leachate.
- (4) Standards for discharge to an off-site treatment works.
 - (A) Each owner or operator that discharges leachate to off-site facilities shall ensure that the receiving facility has all applicable permits or approvals in accordance with state and local water regulations.
 - (B) The owner or operator of a MSWLF may be required to obtain a permit or prior approval for conveyance to an off-site treatment facility.
 - (C) Pumps, meters, valves and monitoring stations that control and monitor the flow of leachate from the unit and which are under the control of the owner or operator shall be considered part of the facility and shall be accessible to the owner or operator at all times.
- (5) Standards for leachate recycling systems.
 - (A) A leachate recycling system shall be utilized only at permitted waste disposal units that meet the following requirements.
 - (i) The unit shall have a liner designed, constructed and maintained to meet the minimum standards of paragraph (e)(1)(A) or (B) of this regulation.
 - (ii) The unit shall have a leachate collection system in place and operating in accordance with subsection (h) of this regulation.
 - (iii) The topography shall be such that any accidental leachate run-off can be controlled by ditches, berms or other equivalent control means.
 - (B) Leachate shall not be recycled during precipitation events or in volumes large enough to cause run-off or surface seeps.
 - (C) The amount of leachate added to the unit shall not exceed the ability of the waste and cover soils to transmit leachate flow downward. All other leachate shall be considered excess leachate, and a leachate management system capable of disposing of all excess leachate shall be available.
 - (D) The leachate storage and distribution system shall be designed to avoid exposure of leachate to air unless aeration or functionally equivalent devices are utilized.
 - (E) The distribution system shall be designed to allow leachate to be evenly distributed beneath the surface over the recycle area.
- (6) Leachate monitoring.
 - (A) Representative samples of leachate shall be collected annually from each unit and tested in accordance with paragraph (i)(6)(B) of this regulation at a frequency of once per year while the leachate management system is in operation.
 - (B) Discharges of leachate from MSWLFs shall be tested for the following constituents prior to treatment or pretreatment:
 - (i) five-day biochemical oxygen demand (BOD(5));
 - (ii) total suspended solids;
 - (iii) total iron;
 - (iv) pH;
 - (v) each of the appendix I parameters listed in K.A.R. 28-29-113; and
 - (vi) any other constituents as specified by the director.

- (C) If it can be shown that the removed constituents are not reasonably expected to be contained in or derived from the waste contained in the unit, the list of constituents in (i)(6)(B) of this regulation may be modified by the director.
 - (D) An appropriate alternative frequency for repeated sampling and analysis for the constituents listed in paragraph (i)(6)(B) of this regulation, or the alternative list approved in accordance with paragraph (i)(6)(C) of this regulation, may be specified by the director during the active life, including closure, and the post-closure care period. The alternative frequency shall be based on consideration of the following factors:
 - (i) leachate quantity; and
 - (ii) long-term trends in leachate quality.
- (7) The owner or operator shall collect and dispose of leachate for a minimum of five years after closure and thereafter until it is determined by the director that treatment is no longer necessary. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-108. Operating standards.

- (a) Excluding the receipt of hazardous waste.** Owners or operators of all MSWLF units shall implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes as defined pursuant to ~~K.A.R. 28-31-3 and K.A.R. 28-31-4~~ K.A.R. 28-31-261, [Note: modified by 28-29-1a] and polychlorinated biphenyls (PCB) wastes as defined in 40 CFR part 761, as in effect on July 1, 1996. This program shall include the following, at a minimum:
- (1) random inspections of incoming loads, unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous wastes or PCB wastes;
 - (2) records of any inspections;
 - (3) training of facility personnel to recognize regulated hazardous waste and PCB wastes; and
 - (4) notification of the department if a regulated hazardous waste or PCB waste is discovered at the facility.
- (b) Daily cover.**
- (1) A uniform layer of at least 0.15 meter (six inches) of soil material shall be placed on all exposed waste at the end of each day of operation.
 - (2) Alternative materials or procedures, including the removal of daily cover before additional waste placement, may be used, if the alternative materials or procedures achieve performance equivalent to the requirements of paragraph (b)(1) in the following areas:
 - (A) prevention of blowing debris;
 - (B) minimization of access to the waste by vectors;
 - (C) minimization of the threat of fires at the open face;
 - (D) minimization of odors; and
 - (E) shedding precipitation.
 - (3) Each owner or operator wishing to use alternative materials for daily cover shall obtain approval from the department before application.
- (c) Intermediate cover.**
- (1) All waste that is not to be covered within 60 days of placement by another lift of waste or final cover in accordance with K.A.R. 28-29-121 shall have a cover consisting of 0.30 meter (one foot) of compacted soil material. In addition, any MSWLF unit that will not receive any waste for an entire growing season shall be seeded.
 - (2) All areas with intermediate cover shall be graded so as to facilitate drainage of runoff and minimize infiltration and standing water.
 - (3) The grade and thickness of intermediate cover shall be maintained until the placement of additional wastes or the final cover. All cracks, rills, gullies, and depressions shall be repaired to prevent access to the solid waste by vectors, to minimize infiltration and to prevent standing water.
- (d) Disease vector control.**
- (1) Each owner or operator of a MSWLF unit shall prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment.

- (2) For purposes of this subsection, "disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease.

(e) MSWLF gas monitoring.

- (1) Each owner or operator of a MSWLF unit that receives putrescible waste or industrial wastes that have the potential to generate explosive gases shall establish and conduct an explosive gases monitoring program to ensure that dangerous levels of explosive gases do not occur within facility structures or at the surface or subsurface facility boundary.
- (2) The monitoring program shall ensure that these conditions are met:
- (A) the concentration of methane gas generated by the facility does not exceed 25% of the lower explosive limit for methane in facility structures, excluding gas control or recovery system components;
 - (B) the concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary; and
 - (C) potential gas migration pathways are identified.
- (3) The minimum monitoring frequency for explosive gases shall be quarterly and shall be based on the following factors:
- (A) soil conditions;
 - (B) the hydrogeologic conditions surrounding the facility;
 - (C) the hydraulic conditions surrounding the facility; and
 - (D) the location of facility structures and property boundaries.
- (4) If methane gas levels exceeding the limits specified in paragraph (e)(2) are detected, the owner or operator shall perform all of the following:
- (A) immediately assess the potential danger posed to human health and the environment and take all necessary steps to ensure protection of human health;
 - (B) within seven days of detecting a gas level exceeding the limit, notify the department and place in the operating record the methane gas levels detected and a description of the steps taken to protect human health;
 - (C) within 60 days of detecting a gas level exceeding the limit, develop and submit to the department a remediation plan, which provides for the installation of an active or passive gas management system; and
 - (D) upon approval of the department, implement the remediation plan.

(f) MSWLF gas management standards.

- (1) Standards for gas venting systems.
- (A) All materials used in gas venting systems shall be resistant to chemical reaction with the constituents of the gas.
 - (B) The gas venting system shall be capable of venting all gas down to the water table or bottom of the liner, whichever is higher.
 - (C) Gas venting systems shall be installed only outside the perimeter of the unit, unless it can be shown that gas venting inside the perimeter of the unit will not interfere with the liner, leachate collection system, cover, or monitoring equipment.
- (2) Standards for gas collection systems.
- (A) Gas collection systems may be installed either within the perimeter of the unit or outside the unit.
 - (B) The owner or operator shall design and operate gas collection systems so that the standards of paragraph (e)(2) are met.
 - (C) Gas collection systems shall transport gas to a central point or points for processing for beneficial uses or disposal, in accordance with the requirements of subsection (g) of this regulation.
 - (D) Gas collection systems shall be designed to function for the entire design period. The design may include changes in the system to accommodate changing gas flow rates or compositions.
 - (E) All materials and equipment used in the construction of gas collection systems shall be rated by the manufacturer as safe for use in hazardous or explosive environments and shall be resistant to corrosion by constituents of the MSWLF gas.

- (F) Gas collection systems shall be designed and constructed to withstand all MSWLF operating conditions, including settlement.
- (G) Gas collection systems and all associated equipment including compressors, flares, monitoring installations, and manholes shall be considered part of the facility.
- (H) Provisions shall be made for collecting and draining gas condensate to the leachate management system or another management system approved by the department.
- (I) A gas collection system shall not compromise the integrity of the liner or of the leachate collection or cover systems.
- (J) The portion of each gas collection system used to convey the gas collected from one or more units for processing and disposal shall be tested to be airtight to prevent the leaking of gas from, or entry of air into, the collection system.
- (K) The gas collection system shall be operated until the waste has stabilized enough to no longer produce methane in quantities that exceed the minimum allowable concentrations set out in paragraph (e)(2) of this regulation.
- (L) Each gas collection system shall be equipped with a mechanical device, capable of withdrawing gas, or shall be designed so that a mechanical device can be easily installed at a later time, if necessary, to meet the allowable concentrations set out in paragraph (e)(2).

(g) MSWLF gas processing and disposal system.

- (1) Each MSWLF with a permanent gas collection system shall evaluate the feasibility of processing of MSWLF gas for use.
- (2) The following MSWLF gas processing devices and disposal systems shall remain under the control of the owner or operator and shall be considered part of the facility:
 - (A) compressors;
 - (B) blowers;
 - (C) raw gas monitoring systems;
 - (D) devices used to control the flow of gas from the unit;
 - (E) flares;
 - (F) gas treatment devices; and
 - (G) air pollution control devices and monitoring equipment.
- (3) All gas discharges and gas processing and disposal systems shall conform with all local, state, and federal air quality requirements.

(h) Air criteria.

- (1) Open burning shall be prohibited, except in accordance with ~~K.A.R. 28-19-47~~ K.A.R. 28-19-647. [*Note: modified by 28-29-1a*]
- (2) Methane, non-methane organic compounds, and other regulated emissions shall conform with all local, state, and federal air quality requirements.

(i) Boundary control.

- (1) Access to the open face area of the unit and all other areas within the boundaries of the facility shall be restricted at all times to prevent unauthorized entry.
- (2) A permanent sign shall be posted at the entrance to the facility stating that disposal of hazardous waste is prohibited and that, unless the waste is a predetermined class of special waste as set forth in K.A.R. 28-29-109(d) and approved for disposal by the MSWLF, special wastes shall be accompanied by a disposal authorization issued by the department. The sign shall also include the following information:
 - (A) solid waste disposal area permit number;
 - (B) hours of operation;
 - (C) penalty for unauthorized trespassing and dumping;
 - (D) name and telephone number of the appropriate emergency response agencies who shall be available to deal with emergencies and other problems, if different from the owner or operator; and
 - (E) name, address, and telephone number of the company operating the facility.

(j) Surface water drainage.

- (1) Each owner or operator of a MSWLF unit shall design, construct, and maintain the following:

- (A) a run-on control system to prevent flow onto the active portion of the MSWLF during the peak discharge from a 24-hour, 25-year storm; and
 - (B) a runoff control system from the active portion of the MSWLF to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- (2) Each surface water control structure shall be operated until the final cover is placed and erosional stability is provided by the vegetative or other cover.
 - (3) Diversion of runoff from undisturbed areas.
 - (A) Runoff from undisturbed areas shall be diverted around disturbed areas, unless the owner or operator shows that it is impractical based on site-specific conditions.
 - (B) Diversion facilities shall be designed to prevent runoff from the 25-year, 24-hour precipitation event from entering disturbed areas.
 - (C) Runoff from undisturbed areas that becomes commingled with runoff from disturbed areas shall be handled as runoff from disturbed areas and managed in accordance with paragraph (j)(1)(B) above.
 - (4) The facility shall not cause the discharge of a nonpoint source of pollution to waters of the United States, including wetlands, that violates any requirement of an area-wide or statewide water quality management plan that has been approved under 33 U.S.C. sections 1288 or 1329.
 - (5) The facility shall not cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of 33 U.S.C. 1251, *et seq.*, 1994 edition.

(k) Liquids restrictions.

- (1) Bulk or noncontainerized liquid waste shall not be placed in MSWLF units unless either of these conditions is met:
 - (A) the waste is residential waste other than septic waste; or
 - (B) the waste is leachate or gas condensate derived from the MSWLF unit, and the MSWLF unit, whether it is a new or existing unit, is designed with a liner and leachate collection system as described in K.A.R. 28-29-103(e), or K.A.R. 28-29-104(e)(1)(A) or (B).
- (2) Containers holding liquid waste shall not be placed in a MSWLF unit unless any of these conditions is met:
 - (A) the container is a small container similar in size to that normally found in residential waste;
 - (B) the container is designed to hold liquids for use other than storage; or
 - (C) the waste is residential waste.
- (3) For purposes of this subsection, these provisions shall apply:
 - (A) "liquid waste" means any waste material that is determined to contain "free liquids" as defined by method 9095A, revision 1, paint filter liquids test, as described in "test methods for evaluating solid waste, physical/chemical methods," EPA pub. no. SW-846, dated December, 1996; and
 - (B) "gas condensate" means the liquid generated as a result of gas collection and recovery process or processes at the MSWLF unit.

(l) Survey controls.

- (1) The boundaries of all waste disposal units, property boundaries, disturbed areas, and the permit area for facilities subject to this part shall be surveyed and marked by a professional land surveyor. All stakes shall be clearly marked, inspected annually, and replaced if missing or damaged.
- (2) Control monuments shall be established to check vertical elevations. The control monuments shall be established and maintained by a professional land surveyor.

(m) Compaction.

- (1) All wastes shall be deposited in the smallest practical area and shall occur at the lowest part of the active face. Wastes may be deposited at locations other than the lowest part of the active face, if site conditions do not allow deposition of wastes at the lowest part of the active face, or if locations other than the lowest part of the active face are in the approved facility operational plan.
- (2) All wastes shall be compacted to the highest achievable density necessary to minimize void space and settlement, unless precluded by extreme weather conditions.

(n) Phasing of operations.

- (1) Waste shall be placed in a manner and at such a rate that mass stability is provided during all phases of operation. Mass stability shall mean that the mass of the waste deposited will not undergo settling or slope failure that interrupts operations at the facility or causes damage to any of the various MSWLF operations or structures, including the liner, leachate or drainage collection system, gas collection system, or monitoring system.
- (2) The phasing of operations at the facility shall be designed in such a way as to allow the sequential construction, filling, and closure of discrete units or parts of units.
- (3) The owner or operator shall design and sequence the waste placement operation in each discrete unit or parts of units to allow the wastes to be built up to each unit's planned final grade as quickly as possible.

(o) Size and slope of working face.

- (1) The working face of the unit shall be no larger than is necessary, based on the terrain and equipment used in waste placement, to conduct operations in a safe and efficient manner.
- (2) The slopes of the working face area shall be no steeper than 2:1, horizontal:vertical, unless the waste is stable at steeper slopes.

(p) Salvaging.

- (1) Salvaging operations shall not cause any of the following:
 - (A) interfere with the operation of the waste disposal facility;
 - (B) result in a violation of any standard in this regulation; or
 - (C) delay the construction or interfere in the operation of any of the following:
 - (i) the liner;
 - (ii) leachate collection system;
 - (iii) daily, intermediate, or final cover; or
 - (iv) any monitoring devices.
- (2) All salvaging operations shall be confined to an area remote from the working face of the MSWLF and be performed in a safe and sanitary manner in compliance with the requirements of this subsection.
- (3) Salvageable materials may be accumulated on-site by a MSWLF owner or operator, if they are managed in a manner that will not create a nuisance, harbor vectors, cause offensive odors, or create an unsightly appearance.
- (4) Scavenging at MSWLFs shall be prohibited.

(q) Recordkeeping.

- (1) The owner or operator of a MSWLF unit shall record and retain on-site for a period of five years, in an operating record, the following information as it becomes available:
 - (A) location restriction demonstrations required under K.A.R. 28-29-102 of this part;
 - (B) inspection records, training procedures, and notification procedures required under K.A.R. 28-29-108(a);
 - (C) gas monitoring results from monitoring and any remediation plans required by K.A.R. 28-29-108(e);
 - (D) MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit as required under K.A.R. 28-29-108(k);
 - (E) demonstrations, certifications, findings, monitoring, testing, or analytical data required by K.A.R. 28-29-111 through K.A.R. 28-29-114;
 - (F) closure and post-closure care plans and any monitoring, testing, or analytical data as required by K.A.R. 28-29-121 and K.A.R. 28-29-122;
 - (G) cost estimates and financial assurance documentation required by K.S.A. 1996 Supp. 65-3407(h), as amended by L. 1997, Ch. 140, Sec. 4;
 - (H) demonstrations for the small landfill exemption as required by K.A.R. 28-29-103;
 - (I) demonstrations that the liner meets the liner standards as required in K.A.R. 28-29-104 (e)(1)(A) or (B); and
 - (J) a copy of the current facility permit, including all approved plans and specifications.
- (2) All information contained in the operating record shall be furnished upon request to the department or made available at any reasonable times for inspection by the department.

(r) Other operating standards.

- (1) In order to achieve and maintain compliance with the requirements of these regulations, adequate equipment shall be available for use at the facility during all hours of operation.
- (2) All utilities, including heat, lights, power and communications equipment, and sanitary facilities, necessary for operation in compliance with the requirements of this regulation shall be available at the facility at all times.
- (3) The owner or operator shall maintain and operate all systems and related appurtenances and structures in a manner that facilitates proper operations in compliance with this regulation.
- (4) The owner or operator shall implement methods for controlling dust to minimize wind dispersal of particulate matter.
- (5) The facility shall be designed, constructed, and maintained to minimize the level of equipment noise audible outside the facility.
- (6) The owner or operator shall make arrangements for fire protection services when a fire protection district or other public fire protection service is available. When such a service is not available, the owner or operator shall institute alternate fire protection measures.
- (7) The owner or operator shall patrol the facility to check for litter accumulation and take all necessary steps to minimize blowing litter, including the use of screens. All litter shall be collected and placed in the fill or in a secure, covered container for later disposal.
- (8) The owner or operator shall implement a plan for litter control for all vehicles on the permitted facility site.
- (9) An operational safety program shall be provided for employees at each MSWLF facility.
- (10) MSWLF access roads shall be of all-weather construction and shall be negotiable at all times by trucks and other vehicles.
- (11) Access to MSWLFs shall be limited to hours when an attendant or operating personnel are at the site.
- (12) The owner or operator of each MSWLF shall maintain a log of commercial or industrial solid wastes received, including sludges, barreled wastes, and special wastes.
 - (A) The log shall indicate the source and quantity of waste and the disposal location.
 - (B) The areas used for disposal of these wastes and other large quantities of bulk wastes shall be clearly shown on a site map and referenced to the boundaries of the tract or other permanent markings.
- (13) Sludges, industrial solid wastes, or special wastes shall not be disposed in a MSWLF until the department has been notified and has issued a disposal authorization including specific arrangements for handling of the wastes.

(s) Operating flexibility.

- (1) The operator of any unit that has been granted a small landfill exemption under K.A.R. 28-29-103 may request from the director approval for alternatives to the following operating requirements:
 - (A) daily cover;
 - (B) MSWLF gas monitoring; and
 - (C) record keeping.
- (2) Each alternate requirement approved by the director shall meet the following requirements:
 - (A) consider the unique characteristics of small communities;
 - (B) take into account climatic and hydrogeologic conditions; and,
 - (C) be protective of human health and the environment. (Authorized by K.S.A. 1996 Supp. 65-3406, as amended by L. 1997, Ch. 139, Sec. 1; implementing K.S.A. 65-3401, as amended by L. 1997, Ch. 140, Sec. 1; effective Oct. 24, 1994; amended July , 10, 1998.)

28-29-109. Special waste.

- (a) Disposal of special waste.** Any person may dispose of special waste, as defined in K.A.R. 28-29-3, if all of the following conditions are met.
- (1) The person disposes of the special waste at a permitted municipal solid waste landfill (MSWLF).
 - (2) A special waste disposal authorization for the special waste has been issued by the department in accordance with subsections (b) and (c) .

(3) All the conditions of subsections (d) through (g) are met.

(b) Request for a special waste disposal authorization. Each person requesting a special waste disposal authorization shall provide the following information to the department:

(1) A description of the waste, including the following information:

- (A) The type of waste;
- (B) the process that produced the waste;
- (C) the physical characteristics of the waste;
- (D) the quantity of waste to be disposed of; and
- (E) the location of the waste generation site, if different from the generator's address;

(2) the following information for the generator of the waste:

- (A) The contact person's name;
- (B) the contact person's address;
- (C) the contact person's telephone number;
- (D) the contact person's electronic mail address, if there is one; and
- (E) the name of the business, if the generator is a business;

(3) the following information for the person requesting the special waste disposal authorization:

- (A) The contact person's name;
- (B) the contact person's address;
- (C) the contact person's telephone number; and
- (D) the contact person's electronic mail address, if there is one; and
- (E) the name of the business, if the request is being made on behalf of a business;

(4) the name and address of each solid waste transfer station proposed for transfer of the waste;

(5) the name and address of the MSWLF proposed for disposal of the waste;

(6) a statement, signed by the generator of the waste or an agent of the generator, that the waste is not a listed hazardous waste and is not a waste that exhibits the characteristics of a hazardous waste specified in K.A.R. 28-31-261, based on knowledge of the process generating the waste, laboratory analyses, or both; and

(7) each laboratory analysis that has been performed to determine if the waste is a listed hazardous waste or is a waste that exhibits the characteristics of a hazardous waste. The person requesting a special waste disposal authorization shall ensure that the following requirements are met:

- (A) Each analysis shall be performed and reported by a laboratory that has departmental certification, if this certification is available, for that analysis;
- (B) each analytical laboratory report shall include the following:
 - (i) Each analysis required to make a determination of hazardous waste characteristics as specified in K.A.R. 28-31-261;
 - (ii) all additional analyses specified by the department;
 - (iii) quality control data; and
 - (iv) a copy of the chain of custody;
- (C) the generator shall provide a signed statement for each analytical laboratory report stating that the analytical results are representative of the waste; and
- (D) if the waste is an unused or spilled product and the waste has not been combined with any substance other than an absorbent, the generator may submit a material safety data sheet for the waste in lieu of laboratory analyses.

(c) Issuance of special waste disposal authorizations.

(1) Not later than 10 working days after the department receives a request for a special waste disposal authorization, the person making the request shall be notified by the department of one of the following determinations:

- (A) The request for a special waste disposal authorization is not complete.
- (B) The waste does not require a special waste disposal authorization for disposal in an MSWLF.
- (C) The waste is a special waste, and the request for a special waste disposal authorization is approved.
- (D) The waste is a hazardous waste, and the request for a special waste disposal authorization is denied.

The denial notification shall include the reason for denial.

- (2) If a special waste is authorized for disposal, a written special waste disposal authorization stating the terms for transportation and disposal of the special waste shall be provided by the department to all of the following persons:
 - (A) The person requesting the special waste disposal authorization, the generator of the waste, or both;
 - (B) the owner or operator of each solid waste transfer station proposed for transfer of the solid waste; and
 - (C) the owner or operator of the MSWLF proposed for disposal of the special waste.
- (3) A special waste disposal authorization shall not obligate the owner or operator of any MSWLF or solid waste transfer station to accept the special waste.
- (d) Petroleum-contaminated soil (PCS).** Sampling and analysis requirements and procedures for soil, which could contain debris, contaminated with petroleum products shall include the following:
 - (1) The generator of the PCS shall collect at least one representative sample for analysis from the first 300 cubic yards of PCS. If the analytical data from the first sample shows that the PCS is not hazardous, the generator shall collect one representative sample for analysis from each 500 cubic yards of PCS after that first sample.
 - (2) The generator may be required by the secretary to collect additional samples .
 - (3) The generator may deviate from the required frequency of sampling schedule with written approval from the secretary. The generator shall submit a written sampling plan and an explanation for the deviation from the required sampling schedule to the secretary for review and approval.
 - (4) The generator shall have each sample analyzed for each the following constituents:
 - (A) 1,2-dichloroethane;
 - (B) benzene; and
 - (C) if required by the department, lead and any other constituent likely to be present in the PCS.
- (e) Generator requirements for transfer of special wastes.** Each generator of special waste or the agent of the generator shall, before transfer of the special waste, provide the transporter with a copy of the special waste disposal authorization for each load of special waste.
- (f) Transporter requirements for transfer and disposal of special wastes.** Before transfer or disposal of special waste, each transporter of special waste shall provide notification of each load of special waste to both of the following persons:
 - (1) The owner or operator of each solid waste transfer station involved in the transport of the special waste; and
 - (2) the owner or operator of the MSWLF at which the special waste will be disposed.
- (g) MSWLF requirements for acceptance and disposal of special wastes.** The owner or operator of each MSWLF shall comply with each of the following requirements:
 - (1) If a load of special waste requires a special waste disposal authorization, check for compliance with the special waste disposal authorization;
 - (2) reject any special waste requiring a special waste disposal authorization if the special waste does not meet both of the following requirements:
 - (A) Has a special waste disposal authorization issued by the department; and
 - (B) meets the requirements of the special waste disposal authorization;
 - (3) notify the department in writing of each special waste load that is rejected at the MSWLF within one business day after the rejection;
 - (4) dispose of the special waste in the MSWLF only if the special waste meets one of the following requirements:
 - (A) Is capable of passing the paint filter liquids test specified in K.A.R. 28-29-108; or
 - (B) is exempt from the liquids restriction as specified in K.A.R. 28-29-108; and
 - (5) maintain documentation in the operating record, as specified in K.A.R. 28-29-108, of each special waste disposed of at the MSWLF, until the MSWLF is certified for closure in accordance with K.A.R. 28-29-121. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3401; effective July 10, 1998; amended May 30, 2003; amended Aug. 16, 2013)

28-29-111. Groundwater monitoring systems; applicability and design.

- (a) The requirements in this regulation shall apply to all MSWLF units, except as provided in subsection (b).
- (b) Groundwater monitoring requirements may be suspended by the department for a MSWLF unit if the owner or operator demonstrates that there is no potential for migration of hazardous constituents from that MSWLF unit to the uppermost aquifer during the active life of the unit and the post-closure care period. This demonstration shall be certified by a qualified groundwater scientist and approved by the department, and shall be based upon:
- (1) site-specific field-collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport; and
 - (2) contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and environment.
 - (3) For the purposes of K.A.R. 28-29-111 and K.A.R. 28-29-112, "hazardous constituent" means all constituents listed in appendix I and appendix II of K.A.R. 28-29-113.
- (c) Each owner or operator of a MSWLF unit shall comply with the groundwater monitoring requirements of this part according to the following schedule.
- (1) Each existing MSWLF unit or lateral expansion less than or equal to one mile from a drinking water intake, surface or subsurface shall be in compliance with applicable groundwater monitoring requirements in K.A.R. 28-29-111 through K.A.R. 28-29-114 by October 9, 1994.
 - (2) Each existing MSWLF unit or lateral expansion greater than one mile but less than or equal to two miles from a drinking water intake, surface or subsurface, shall be in compliance with applicable groundwater monitoring requirements in K.A.R. 28-29-111 through K.A.R. 28-29-114 by October 9, 1995.
 - (3) Each existing MSWLF unit or lateral expansion greater than two miles from a drinking water intake, surface or subsurface, shall be in compliance with the groundwater monitoring requirements in K.A.R. 28-29-111 through K.A.R. 28-29-114 by October 9, 1996.
 - (4) Each MSWLF unit which meets the requirements of K.A.R. 28-29-103(a) and is less than or equal to two miles from a drinking water intake, surface or subsurface, shall be in compliance with applicable groundwater monitoring requirements in K.A.R. 28-29-111 through K.A.R. 28-29-114 by October 9, 1995.
 - (5) Each MSWLF unit which meets the requirements of K.A.R. 28-29-103(a) and is greater than two miles from a drinking water intake, surface or subsurface, shall be in compliance with the groundwater monitoring requirements in K.A.R. 28-29-111 through K.A.R. 28-29-114 by October 9, 1996.
 - (6) Each new MSWLF unit except those meeting the requirements of K.A.R. 28-29-103(a), shall be in compliance with the groundwater monitoring requirements specified in subsection (f) before waste may be placed in the unit.
- (d) Once a MSWLF unit has been established, groundwater monitoring shall be conducted throughout the active life and post-closure care period of that MSWLF unit.
- (e) For the purposes of K.A.R. 28-29-100 through K.A.R. 28-29-121, a "qualified groundwater scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields. Sufficient training may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgements regarding groundwater monitoring, contaminant fate and transport, and corrective action.
- (f) Groundwater monitoring systems.
- (1) A groundwater monitoring system shall be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that:
 - (A) represent the quality of background groundwater that has not been affected by leakage from a unit; and
 - (B) represent the quality of groundwater passing the point of compliance.
 - (2) The owner or operator shall maintain records that, at a minimum include the following:

- (A) exact well three-dimensional location;
 - (B) well size;
 - (C) type of well;
 - (D) the design and construction practice used in well installation; and
 - (E) well and screen depths.
- (3) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring program. The owner or operator shall maintain wells to operate throughout the design period of the landfill.
- (4) Standards for the location of monitoring points in the detection monitoring system.
- (A) Each monitoring well shall be located in a stratigraphic horizon that could serve as a contaminate migration pathways.
 - (B) Lateral distance from the unit.
 - (i) For new units, each monitoring well shall be established at a lateral distance not greater than 150 meters (492 feet) from the planned edge of the unit. Each well shall be located on the owner's or operator's property, and shall be at least 15.24 meters (50 feet) from the property boundary. The requirements of paragraph (f)(4)(B)(i) shall not apply to vertical expansions or existing units that are in operation on October 9, 1996.
 - (ii) For existing units, each monitoring well shall be established at a lateral distance not greater than 150 meters (492 feet) from the planned edge of the unit, and shall be located on the owner's or operator's property.
 - (C) The number, spacing, and depths of monitoring wells shall be:
 - (i) determined based upon site-specific technical information gathered from the hydrogeologic investigation conducted pursuant to K.A.R. 28-29-104(b); and
 - (ii) certified by a qualified groundwater scientist.
 - (D) The network of monitoring points of several potential sources of discharge within a single facility may be combined into a single monitoring network, provided that discharges from any part of all potential sources can be detected. The following information shall be provided by the owner or operator as requested by the department for use in evaluating an owner's or operator's proposal for a multi-unit monitoring system:
 - (i) number, spacing, and orientation of each MSWLF unit,
 - (ii) hydrogeologic setting;
 - (iii) site history;
 - (iv) engineering design of each MSWLF unit; and
 - (v) type of waste accepted at each MSWLF unit.
- (5) Well construction standards.
- (A) Each monitoring well shall be constructed in accordance with K.A.R. 28-30-6.
 - (B) Each monitoring well shall be cased with inert materials that will not affect the water sample. Casing requiring solvent-cement type couplings shall not be used.
 - (C) Each well shall be screened to allow sampling only at the desired interval. The slot size of the screen and filter pack shall be designed to minimize turbidity. Screens shall be fabricated from material expected to be inert with respect to the constituents of the groundwater to be sampled.
 - (D) Each well shall be equipped with a device to protect against tampering and damage.
 - (E) Each well shall be developed to allow free entry of water and minimize turbidity of the sample.
 - (F) The transmissivity of the zone surrounding each well screen shall be established by field-testing techniques. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-112. Groundwater monitoring systems; sampling and data analysis requirements.

- (a) The groundwater monitoring program shall include consistent sampling and analysis procedures to ensure that monitoring results provide data representative of groundwater quality in the zone being monitored.

- (b)** The owner or operator shall develop a sampling and analysis plan to submit to the department for approval that includes the following:
- (1) a quality assurance and quality control program for field sampling procedures and laboratory analysis that provides:
 - (A) quantitative detection limits;
 - (B) the degree of error for analysis of each chemical constituent;
 - (C) equipment decontamination procedures; and
 - (D) other field quality assurance protocols;
 - (2) A sample preservation and shipment procedure that maintains the integrity of the sample collected for analysis;
 - (3) a chain of custody procedure to prevent tampering and contamination of the collected samples prior to completion of analysis;
 - (4) the sampling procedures and analytical methods that will be used, why they are appropriate for groundwater sampling and whether they accurately measure constituents in groundwater samples; and
 - (5) the statistical method or methods listed in subsection (h) of this regulation which will be used in evaluating monitoring data for each constituent detected.
- (c)** Groundwater samples shall not be field-filtered prior to laboratory analysis. The director may require field filtered samples in cases where turbidity affects the validity of the results.
- (d)** The owner or operator shall determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells that monitor the same waste-management area shall be measured within a period of time short enough to avoid temporal variations in groundwater flow that could preclude accurate determination of groundwater flow rate and direction.
- (e)** The owner or operator shall conduct quarterly groundwater monitoring for one year to determine background concentrations for each of the monitoring parameters or constituents required in the detection groundwater monitoring program, set out in K.A.R. 28-29-113(a).
- (f)** Background groundwater quality may be established at wells that are not located hydraulically upgradient from the MSWLF unit if:
- (1) hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; or
 - (2) sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells.
- (g)** The number of samples collected shall be consistent with the appropriate statistical procedures determined pursuant to this regulation.
- (h)** The following methods shall be acceptable statistical methods to be utilized in evaluating groundwater monitoring data, and shall be applied separately to each constituent detected in each well:
- (1) a parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. This method shall include an estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent;
 - (2) an analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. This method shall include an estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent;
 - (3) a tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit;
 - (4) a control chart approach that gives control limits for each constituent; or
 - (5) another statistical test method that meets the following performance standards:
 - (A) The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a

normal theory test, then the data may be transformed or a distribution-free theory test may be used.

If the distributions for the constituents differ, more than one statistical method may be needed.

- (B) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test shall be done at a type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the type I experiment-wise error rate for each testing period shall be no less than 0.05; however, the type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard shall not apply to tolerance intervals, prediction intervals, or control charts.
- (C) If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
- (D) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain, shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
- (E) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
- (F) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.
- (i) Any owner or operator wishing to use an alternative statistical test shall seek the approval of the department and provide a justification, for the alternative test. The justification shall demonstrate that the alternative method meets the performance standards listed in paragraph (h)(5) above.
- (j) The owner or operator shall determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular groundwater monitoring program that applies to the MSWLF unit.
 - (1) The owner or operator shall submit the statistical analyses to the department within 45 days of receipt of analytical results.
 - (2) If requested by the department, the results of the statistical analyses shall be provided in electronic form via computer disc, or other electronic means.
 - (3) If requested by the department, the raw analytical data shall also be provided.
- (k) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the groundwater quality of each parameter or constituent at each downgradient monitoring well to the background value of that constituent, according to the statistical procedures and performance standards specified in this regulation. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-113. Groundwater monitoring systems, detection and assessment monitoring.

(a) Detection monitoring program.

- (1) Detection monitoring shall be required at each groundwater monitoring well as defined in K.A.R. 28-29-111. At a minimum, a detection monitoring program shall include the monitoring for the constituents listed in appendix I of this regulation. The owner or operator shall also conduct the following evaluations at each well at the time of sample collection and immediately before filtering, if applicable, and preserving samples for shipment:
 - (A) elevation of the water table;
 - (B) depth of the bottom of the well;

- (C) pH of the sample;
 - (D) temperature of the sample;
 - (E) specific conductance of the sample; and
 - (F) observations of the physical characteristics of the sample.
- (2) The monitoring frequency for each constituent listed in appendix I shall be semiannual during the active life of the facility, including closure, and the postclosure period except that monitoring shall be quarterly for the first year. At least one sample from each well, background and downgradient, shall be collected and analyzed. An appropriate alternative frequency for sampling and analysis may be specified by the director. However, the alternative frequency shall be no less than annually.
 - (3) If the owner or operator determines that there is a statistically significant increase over background for one or more of the constituents listed in Appendix I at any monitoring well, the owner or operator shall:
 - (A) notify the director within 14 calendar days of this finding. The notification shall indicate which constituents have shown statistically significant changes from background levels; and
 - (B) within 30 calendar days of this finding, resample the wells showing the statistically significant increase to confirm the finding. If the statistically significant increase is not confirmed, the owner or operator shall return to the detection monitoring program specified in paragraph (a)(1) of this regulation.
 - (i) If the statistically significant increase is confirmed, the owner or operator shall conduct an assessment monitoring program meeting the requirements of subsection (b) of this regulation, and develop a release assessment plan to determine the nature and extent of the release within 90 days of confirming the statistically-significant increase.
 - (ii) Upon approval of the release assessment plan by the director, the owner or operator shall implement the release assessment plan, and prepare and submit a report summarizing all activities and findings according to the schedule specified in the plan and approved by the department.
 - (iii) In lieu of paragraph (a)(3)(B)(i) and (ii) above, the owner or operator may demonstrate to the department that a source other than MSWLF unit caused the contamination, that the statistically significant increase resulted from a natural variation in groundwater quality, or that the statistically significant increase resulted from an error in sampling. A report documenting this demonstration shall be certified by a qualified groundwater scientist and placed in the operating record. If a successful demonstration is made to and approved by the department, the owner or operator may continue detection monitoring as specified in paragraph (a)(1) of this regulation. If after 90 days a successful demonstration is not made, the owner or operator shall conduct assessment monitoring as required in subsection (b) of this regulation, and develop a release assessment plan to determine the nature and extent of the release.

(b) Assessment monitoring.

- (1) Assessment monitoring shall be required for:
 - (A) new municipal solid waste landfills or units, or existing municipal solid waste landfills or units which have established background groundwater concentrations for the appendix I constituents, whenever a statistically significant increase over background has been detected for one or more of the constituents listed in appendix I; and
 - (B) existing municipal solid waste landfills or units that have not established background groundwater concentrations for the appendix I constituents if groundwater contamination exists that exceeds the maximum contamination limits (MCL's) for any organic constituent contained in appendix I.
- (2) Within 90 days of triggering assessment monitoring, the owner or operator shall sample each downgradient well, or those wells specified by the director, and analyze the groundwater for:
 - (A) all constituents identified in appendix II; and
 - (B) the parameters listed in paragraph (a)(1) of this regulation.
- (3) Within 180 days of the sampling event described in paragraph (b)(2), the owner or operator shall collect and analyze from each background and downgradient well a minimum of three independent samples to

establish background concentrations for each appendix II constituent detected during paragraph (b)(2) analyses.

- (4)(A) Within 90 days of the sampling event described in paragraph (b)(3), and on a semiannual basis thereafter, the owner or operator shall sample each downgradient well, or those wells specified by the director, and conduct analysis for all constituents in appendix I and for each constituent in appendix II that is detected during paragraph (b)(2) analyses.
- (B) In addition, the owner or operator shall sample each downgradient well for each appendix II constituents on an annual basis.
- (C) All analytical results shall be recorded in the facility operating record.
- (5) Whenever a new constituent or constituents is detected in a downgradient well as a result of the sampling described in paragraphs (b)(2) or (4), above, the owner or operator shall:
 - (A) notify the director within 14 days of each appendix II constituent that has been detected;
 - (B) collect and analyze from each background and downgradient well a minimum of four independent samples to establish background concentrations for the new constituent or constituents; and
 - (C) include any new constituents detected in any subsequent monitoring.
- (6) If it can be shown that the removed constituents are not reasonably expected to be contained in, or derived from the waste contained in the unit, appendix II monitoring for a MSWLF unit may be modified by the director.
- (7) An appropriate alternate frequency for repeated sampling and analysis for the full set of appendix II constituents during the active life, including closure, and post-closure care of the unit may be specified by the director.
- (8) An appropriate subset of wells to be sampled and analyzed for appendix II constituents during assessment monitoring may be specified by the director.
- (9) If the concentrations of all appendix II constituents are shown to be at or below background values, using the statistical procedures in K.A.R. 28-29-112 for two consecutive sampling events, the owner or operator shall notify the department of this finding and may return to detection monitoring, if approved by the department.
- (10) If the concentrations of any appendix II constituents are above background values, but all concentrations are below the groundwater protection standard established under subsection (13) using the statistical procedures in section K.A.R. 28-29-112, the owner or operator shall continue assessment monitoring in accordance with this regulation. Based on an analysis of groundwater contamination trends, it may be requested by the director that the owner or operator proceed to the assessment of corrective measures, as described in K.A.R. 28-29-114.
- (11) If one or more appendix II constituents are detected at statistically-significant levels above the groundwater protection standard in any sampling event, the owner or operator shall, within 14 days of this finding, notify the department and identify each appendix II constituent that has exceeded the groundwater protection standard.
- (12) If a determination is made that contamination has migrated off -site, the owner or operator shall immediately notify all appropriate local government officials and all persons who own the land or reside on the land that directly overlies any part of the plume of contamination.
- (13) A groundwater protection standard for each appendix II constituent detected in the groundwater shall be established by the department. The groundwater protection standard shall be:
 - (A) the maximum contaminant level (MCL) where an MCL has been promulgated under section 1412 of the safe drinking water act under 40 CFR part 141, as in effect on July 1, 1992;
 - (B) the background concentration for the constituent established from wells in accordance with paragraph (b)(5)(B) of this regulation; or
 - (C) the background concentration for the constituent established from wells in accordance with paragraph (b)(5)(B) if the background level is higher than:
 - (i) the MCL; or
 - (ii) the health-based levels identified under paragraph (b)(14).

- (14) An alternative groundwater protection standard for constituents for which MCLs have not been established may be approved by the department. These groundwater protection standards shall be appropriate health-based levels that satisfy the following criteria:
- (A) The level is derived in a manner consistent with environmental protection agency guidelines for assessing the health risks of environmental pollutants, 51 Federal Register 33992, 34006, 34014, 34028, dated September 24, 1986;
 - (B) the level is based on scientifically valid studies conducted in accordance with the toxic substances control act good laboratory practice standards, 40 CFR part 792, as in effect on July 1, 1992, or equivalent;
 - (C) for carcinogens, the level represents a concentration associated with an excess lifetime cancer-risk level, due to continuous lifetime exposure, within the 1×10^{-4} to 1×10^{-6} range; and
 - (D) for systemic toxicants, the level represents a concentration to which the human population, including sensitive subgroups, could be exposed on a daily basis which is likely to be without appreciable risk of deleterious effects during a lifetime. For purposes of this paragraph, systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.
- (15) A standard in lieu of paragraph (b)(13) may be designated by the director while an alternative standard is being developed pursuant to paragraph (b)(14)

(c) Appendices.

APPENDIX I

GEOCHEMICALS

Alkalinity	Chloride	Sodium, dissolved
Calcium	Nitrogen (Ammonia)	Sulfate
Chemical Oxygen Demand (COD)	Potassium, dissolved	Total Dissolved Solids (TDS)

VOLATILE ORGANICS

Acetone	Dibromochloromethane	Tetrachlorethene*
Benzene*	1,1-Dichloroethane	Toluene*
Bromodichloromethane	1,2-Dichloroethane*	Total Xylenes*
Bromomethane	1,1-Dichloroethene*	1,1,2,2-Tetrachloroethane
Bromoform	trans-1,2-Dichloroethene	1,1,1-Trichloroethane*
2-Butanone	1,2-Dichloropropane*	1,1,2-Trichloroethane
Carbon Disulfide	cis-1,3-Dichloropropene	Trichloroethene*
Carbon tetrachloride	Trans-1,3-Dichloropropene	Vinyl acetate
Chlorobenzene	Ethylbenzene	Vinyl chloride*
Chlorethane	2-Hexanone	
2-Chloroethylvinyl ether	4-Methyl-2-pentanone	*MCL promulgated
Chloroform	Methylene chloride	
Chloromethane	Styrene*	

APPENDIX II

GEOCHEMICALS

Alkalinity	Chloride	Sodium, dissolved
Calcium	Nitrogen (Ammonia)	Sulfate
Chemical Oxygen Demand (COD)	Potassium, dissolved	Total Dissolved Solids (TDS)

METALS

Antimony	Chromium	Selenium
Arsenic	Cobalt	Silver
Barium	Copper	Thallium
Beryllium	Lead	Vanadium
Cadmium	Nickel	Zinc

POLYNUCLEAR AROMATIC HYDROCARBONS

Acenaphthene	Benzo(ghi)perylene	Dibenzo(a,i)pyrene
Acenaphthylene	Chrysene	Fluoranthene
Anthracene	Dibenz(a,h)acridine	Fluorene
Benzo(a)anthracene	Dibenz(a,j)acridine	Indeno(1,2,3-cd)pyrene
Benzo(a)pyrene	Dibenzo(a,h)anthracene	3-Methylcholanthrene
Benzo(b)fluoranthene	7H-Dibenzo(c,g)carbazole	Naphthalene
Benzo(j)fluoranthene	Dibenzo(a,e)pyrene	Phenanthrene
Benzo(k)fluoranthene	Dibenzo(a,h)pyrene	Pyrene

CHLORINATED HYDROCARBONS

Benzal chloride	1,3-Dichlorobenzene	Hexachlorocyclopentadiene
Benzotrichloride	1,4-Dichlorobenzene	Hexachloroethane
Benzyl chloride	Hexachlorobenzene	Tetrachlorobenzenes
2-Chloronaphthalene	Hexachlorobutadiene	1,2,4-Trichlorobenzene
1,2-Dichlorobenzene	Hexachlorocyclohexane	Pentachlorohexane

ORGANOPHOSPHORUS PESTICIDES

Azinphos methyl	Dichlorvos	Naled
Bolstar	Disulfoton	Parthion methyl
Chlorpyrifos	Ethroprop	Phorate
Coumaphos	Fensulfothion	Ronnel
Demeton-O	Fenthion	Stirophos (Tetrachlorvinphos)
Demeton-S	Merphos	Tokuthion (Prothiofos)
Diazinon	Mevinphos	Trichloronate

CHLORINATED HERBICIDES

2,4-D	Dalapon	MCPA
2,4-DB	Dicamba	MCPP
2,4,5-T	Dichloroprop	
2,4,5-TP (silvex)	Dinoseb	

VOLATILE ORGANICS

Acetone	Chloromethane	Methylene chloride
Benzene	Dibromochloromethane	Styrene
Bromodichloromethane	1,1-Dichloroethane	Tetrachloroethene
Bromomethane	1,2-Dichloroethane	Toluene
Bromoform	1,1-Dichloroethene	Total Xylenes
2-Butanone	trans-1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Carbon Disulfide	1,2-Dichloropropane	1,1,1-Trichloroethane
Carbon tetrachloride	cis-1,3-Dichloropropene	1,1,2-Trichloroethane
Chlorobenzene	trans-1,3-Dichloropropene	Trichloroethene
Chlorethane	Ethyl benzene	Vinyl acetate
2-Chloroethylvinyl ether	2-Hexanone	Vinyl chloride
Chloroform	4-Methyl-2-pentanone	

VOLATILE ORGANICS

Benzene	Dibromomethane	Naphthalene
Bromobenzene	1,2-Dichlorobenzene	n-Propylbenzene
Bromochloromethane	1,3-Dichlorobenzene	Styrene
Bromodichloromethane	1,4-Dichlorobenzene	1,1,1,2-Tetrachloroethane
Bromoform	Dichlorodifluoromethane	1,1,2,2-Tetrachloroethane
Bromoethane	1,1-Dichloroethane	Tetrachloroethene
n-Butylbenzene	1,2-Dichloroethane	Toluene
sec-Butylbenzene	1,1-Dichloroethene	1,2,3-Trichlorobenzene
tert-Butylbenzene	cis-1,2-Dichloroethene	1,2,4-Trichlorobenzene
Carbon tetrachloride	trans-1,2-Dichloroethene	1,1,1-Trichloroethane
Chlorobenzene	1,2-Dichloropropane	1,1,2-Trichloroethane
Chloroethane	1,3-Dichloropropane	Trichloroethene
Chloroform	2,2-Dichloropropane	Trichlorofluoromethane
Chloromethane	1,1-Dichloropropene	1,2,3-Trichloropropane
2-Chlorotoluene	Ethylbenzene	1,2,4-Trimethylbenzene
4-Chlorotoluene	Hexachlorobutadiene	1,3,5-Trimethylbenzene
Dibromochloromethane	Isopropylbenzene	Vinyl chloride
1,2-Dibromo-3-chloropropane	p-Isopropyltoluene	o,m,p-Xylene
1,2-Dibromoethane	Methylene chloride	

(Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-114. Corrective action.

(a) Assessment of corrective measures.

- (1) After consideration of the results from the release assessment conducted pursuant to K.A.R. 28-29-113(a)(3)(B), the owner or operator may be asked by the director to conduct an assessment of corrective measures that includes an analysis of:
 - (A) performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;
 - (B) time required to begin and complete the remedy,
 - (C) costs of remedy implementation; and
 - (D) institutional requirements such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy or remedies.

- (2) The owner or operator shall continue to monitor in accordance with the assessment monitoring program as specified in K.A.R. 28-29-113(b).
- (3) The owner or operator shall make a recommendation for one of the corrective measures assessed and include a rationale for the choice in the corrective measures assessment report.
- (4) The owner or operator shall conduct a public hearing to discuss the range of corrective measures evaluated, the recommended corrective measures, and the rationale outlined in the assessment report.

(b) Remedy.

- (1) After consideration of the results of the corrective measures assessment and the public comments received, the owner or operator shall propose a remedy and a schedule for implementation to the department for approval. The remedy shall:
 - (A) be protective of human health and the environment;
 - (B) attain the groundwater protection standards;
 - (C) control the source or sources of releases, so as to reduce or eliminate, to the maximum extent practicable, further releases of constituents identified in appendix II of K.A.R. 28-29-113 into the environment that may pose a threat to human health or the environment; and
 - (D) comply with standards for management of wastes as specified in paragraph (c)(4) of this regulation.
- (2) In approving a remedy, the following evaluation factors shall be considered by the director:
 - (A) the long-term and short-term effectiveness and protectiveness of the potential remedy or remedies, along with the degree of certainty that the remedy will prove successful;
 - (B) the effectiveness of the remedy in controlling the source to reduce further releases;
 - (C) the ease or difficulty of implementing a potential remedy or remedies;
 - (D) practicable capability of the owner or operator, including a consideration of the technical and economic capability; and
 - (E) the degree to which community concerns are addressed by a potential remedy or remedies.
- (3) A remedy other than that proposed by the owner or operator may be specified by the director.
- (4) It may be determined by the director that remediation of a release of a constituent identified in appendix II of K.A.R. 28-29-113 from a MSWLF unit is not necessary if the owner or operator demonstrates to the satisfaction of the director any one of the following:
 - (A) the groundwater is additionally contaminated by substances that have originated from a source other than a MSWLF unit and those substances are present in concentrations such that cleanup of the release from the MSWLF unit would provide no significant reduction in risk to public, health and the environment;
 - (B) remediation of the release or releases is technically impracticable; or
 - (C) remediation results in unacceptable cross-media impacts.
- (5) A determination by the director that remediation is not necessary shall not affect the authority of the department to require the owner or operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the groundwater, to prevent exposure to the groundwater, or to remediate the groundwater to concentrations that are technically practicable and significantly reduce threats to human health or the environment.
- (6) The owner or operator may be required by the director to take any interim measures necessary to ensure the protection of human health and the environment. Interim measures shall, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any remedy selected.

(c) Implementation of the corrective action program.

- (1) Based on the schedule established under paragraph (b)(1) above, the owner or operator shall implement the corrective action remedy selected under subsection (b).
- (2) An owner or operator or the director may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of paragraph (b)(1) is not being achieved through the remedy selected. In such cases, the owner or operator shall implement other methods or techniques that practicably achieve compliance with the requirements.

- (3) If the owner or operator or director determines that compliance with requirements under paragraph (b)(1) cannot be practically achieved with any currently available methods, the owner or operator shall:
 - (A) obtain certification of a qualified groundwater scientist that compliance cannot be practically achieved with any currently available methods;
 - (B) implement alternate measures to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment;
 - (C) implement alternate measures for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures; and
 - (D) submit a report to the director justifying the alternative measures prior to implementing the alternative measures.
- (4) Each solid waste that is managed pursuant to a remedy or an interim measure shall be managed in accordance with Kansas waste management standards.
- (5) Remedies selected pursuant to subsection (b) shall be considered complete when:
 - (A) the owner or operator complies with the groundwater protection standards, established under K.A.R. 28-29-113(b)(13) at the point of compliance;
 - (B) compliance with the groundwater protection standards has been achieved by demonstrating that concentrations of constituents identified in appendix II of K.A.R. 28-29-113 have not exceeded the groundwater protection standard or standards for a period of three consecutive years using the statistical procedures and performance standards in K.A.R. 28-29-112. An alternative length of time during which the owner or operator shall demonstrate that concentrations of constituents identified in appendix II of K.A.R. 28-29-113 have not exceeded the groundwater protection standard or standards may be specified by the director, taking into consideration the:
 - (i) extent and concentration of the release or releases;
 - (ii) behavior characteristics of the contaminants in the groundwater;
 - (iii) accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and
 - (iv) characteristics of the groundwater; and
 - (C) all actions required to complete the remedy have been satisfied.
- (6) Upon completion of the remedy, the owner or operator shall submit to the director a copy of a certification that the remedy has been completed in compliance with the requirements of paragraph (b)(1) and initiate a detection monitoring plan. The certification shall be signed by the owner or operator and by a qualified groundwater scientist.
- (7) Upon receipt of the certification, if the director determines that the corrective action remedy has been completed in accordance with the requirements of this section, the owner or operator shall be released from the requirements for financial assurance for corrective action under K.A.R. 28-29-122. Where appropriate and necessary, a new schedule for continued detection monitoring shall be established by the director. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-121. Closure requirements.

- (a) Upon ceasing to receive waste, the unit shall be covered by a final cover consisting of a low permeability layer overlaid by a final protective layer constructed in accordance with the requirements of this regulation.
- (b) Not later than 30 days after placement of the final lift of solid waste, closure activities shall begin, except as provided in subsection (c) of this regulation.
- (c) The deadline for construction of the final cover may be extended by the director if:
 - (1) the unit has remaining capacity and there is a reasonable likelihood that the MSWLF unit will receive additional wastes;
 - (2) leachate is to be recirculated for a period after final receipt of waste in accordance with provisions in K.A.R. 28-29-104(i)(6); or
 - (3) the owner or operator demonstrates to the department that initiation of closure will, of necessity, take longer than 30 days.

- (d)** For any unit receiving an extension of the closure deadline as provided in subsection (c), it may be required by the director that the owner or operator comply with some or all of the provisions for intermediate cover in K.A.R. 28-29-108(c).
- (e)** For each MSWLF receiving waste after October 9, 1993, the low permeability layer shall consist of one of the following:
 - (1) a geomembrane underlaid by 0.45 meters (18 inches) of compacted soil with a permeability of 1×10^{-5} centimeters per second or less if geomembrane is used in the bottom liner system; or
 - (2) the lesser of:
 - (i) 0.45 meters (18 inches) of compacted soil with a permeability less than or equal to the bottom liner system or natural subsoils; or
 - (ii) 0.45 meters (18 inches) of compacted soil with a permeability of 1×10^{-5} centimeters per second or less.
- (f)** If a geomembrane is used in the low permeability layer, it shall be constructed in accordance with the following standards.
 - (1) The geomembrane shall have strength to withstand the normal stresses imposed by the waste stabilization process.
 - (2) The geomembrane shall be placed over a prepared base free from sharp objects and other materials that may caused damage.
 - (3) The effects of landfill gas below the geomembrane shall be addressed.
 - (4) The effect of drainage through the final protective cover onto the geomembrane shall be addressed.
- (g)** The final protective layer shall be constructed in accordance with the following standards.
 - (1) The final protective layer shall cover the entire low permeability layer.
 - (2) The thickness of the final protective layer shall be at least as thick as the frost penetration depth at the landfill site and shall minimize root penetration of the low permeability layer.
 - (3) The final protective layer shall consist of soil material capable of supporting vegetation.
- (h)** The final protective layer shall be placed as soon as possible after placement of the low permeability layer to prevent desiccation, cracking, freezing or other damage to the low permeability layer.
- (i)** The owner or operator shall prepare a written closure plan that describes the steps necessary to close each MSWLF unit at any point during its active life in accordance with the cover design requirements. The closure plan, at a minimum, shall include the following information:
 - (1) plans for the final contours, type and depth of cover material, landscaping, and access control;
 - (2) an estimate of the largest area of the MSWLF unit ever requiring a final cover at any time during the active life;
 - (3) an estimate of the maximum inventory of wastes ever on-site over the active life of the MSWLF facility;
 - (4) final surface water drainage patterns and run-off retention basins;
 - (5) plans for the construction of liners, leachate collection and treatment systems, gas migration barriers or other gas controls;
 - (6) cross-sections of the site that delineate the disposal or storage locations of wastes. The cross-sections shall depict liners, leachate collection systems, the waste cover, and other applicable details;
 - (7) removal of all solid wastes from processing facilities; and
 - (8) a schedule for completing all closure activities.
- (j)** The closure plan shall be prepared not later than the effective date of this part, or by the initial receipt of waste, whichever is later, and shall be submitted to the department.
- (k)** A minimum of 60 days prior to beginning closure of each MSWLF unit, an owner or operator shall notify the department of the intent to close a unit.
- (l)** The owner or operator shall complete closure activities of each unit in accordance with the closure plan within 180 days following the beginning of closure. Extensions of the closure period may be granted by the director if the owner or operator demonstrates that:
 - (i) closure will, of necessity, take longer than 180 days; and
 - (ii) all steps have been taken and will continue to be taken to prevent threats to human health and the environment from the unclosed unit.

- (m) Following closure of each MSWLF unit, the owner or operator shall submit a certification to the department. The certification shall be signed by an independent registered professional engineer, or approved by the director, and shall verify that closure has been completed in accordance with the closure plan.
- (n) Following closure of all MSWLF units in a facility, the owner or operator shall perform the following tasks.
 - (1) The owner or operator shall file a restrictive covenant with the office of register of deeds for the county in which the property is located, pursuant to the requirements of K.A.R. 28-29-20. The restrictive covenant shall, in perpetuity, notify any potential purchaser of the property that:
 - (A) the property has been used as a MSWLF; and
 - (B) the use of the property is subject to the restricts of the post-closure plan in subsection (p) of this regulation.
 - (2) The owner or operator shall notify the director that a restrictive covenant has been recorded pursuant to the requirements of paragraph (1) of this subsection.
- (o) The owner or operator may request permission from the director to remove the restrictive covenant if all wastes are removed from the facility.
- (p) Post-closure care requirements.**
 - (1) Following closure of each MSWLF unit, the owner or operator shall conduct post-closure care. Post-closure care shall be conducted for 30 years, except as provided under paragraph (2) of this subsection, and shall consist of at least the following activities:
 - (A) maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;
 - (B) maintaining and operating the leachate collection system, pursuant to K.A.R. 28-29-104(h);
 - (C) monitoring the groundwater in accordance with the requirements of K.A.R. 28-29-113 and maintaining the groundwater monitoring system, if applicable; and
 - (D) maintaining and operating the gas monitoring system in accordance with the requirements of K.A.R. 28-29-108(e).
 - (2) The length of the post-closure care period may be increased by the director if the director determines that the lengthened period is necessary to protect human health and the environment.
 - (3) The owner or operator of each MSWLF unit must prepare a written post-closure plan that includes, at a minimum, the following information:
 - (A) plans for the post-closure operation and maintenance of liners, leachate and gas collection and treatment systems, cover material, run-off, retention basins, landscaping, and access control;
 - (B) plans for monitoring and surveillance activities during post-closure;
 - (C) name, address, and telephone number of the person or office to contact about the facility during the post-closure period; and
 - (D) a description of the planned uses of the property during the post-closure period.
 - (i) Post-closure use of the property shall not disturb the integrity of the final cover, liner or liners, or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this regulation.
 - (ii) If the owner or operator demonstrates that disturbance of the final cover, liner or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment, the disturbance may be approved by the director.
 - (4) The owner or operator shall prepare a post-closure plan not later than the effective date of this regulation, or by the initial receipt of waste, whichever is later, and submit it to the director.
 - (5) Following completion of the post-closure care period for each MSWLF unit, the owner or operator shall submit a certification to the director. The certification shall be signed by an independent registered professional engineer, or approved by the director, and must verify that post-closure care has been completed in accordance with the post-closure plan. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

CONSTRUCTION AND DEMOLITION LANDFILLS

28-29-300. Definitions.

- (a) For the purposes of K.A.R. 28-29-300 through K.A.R. 28-29-333, the following definitions shall apply:
- (1) "C&D" means construction and demolition.
 - (2) "C&D contact water" means liquid, consisting primarily of precipitation, that has infiltrated through the C&D waste or has been in contact with the C&D waste for any period of time. This term shall include all runoff from the active area of the C&D landfill and all liquid derived from the C&D waste.
 - (3) "C&D landfill" shall have the meaning assigned to Aconstruction and demolition landfill@ in K.S.A. 65-3402, and amendments thereto.
 - (4) "C&D waste" shall have the meaning assigned to Aconstruction and demolition waste@ in K.S.A. 65-3402, and amendments thereto. For the purposes of this definition, the following clarifications shall apply:
 - (A) "Furniture and appliances" shall not include computer monitors and other computer components, televisions, videocassette recorders, stereos, and similar waste electronics.
 - (B) "Treated wood" shall include wood treated with any of the following:
 - (i) Creosote;
 - (ii) oil-borne preservatives, including pentachlorophenol and copper naphthenate;
 - (iii) waterborne preservatives, including chromated copper arsenate (CCA), ammoniacal copper zinc arsenate (ACZA), and ammoniacal copper quaternary compound (ACQ); or
 - (iv) any other chemical that poses a risk to human health or safety or the environment that is similar to any of the risks posed by the chemicals specified in paragraphs (a)(4)(B)(i) through (iii) .
 - (C) "Untreated wood" shall include the following, if the wood has not been treated with any of the chemicals listed in paragraphs (a)(4)(B)(i) through (iv) :
 - (i) Coated wood, including wood that has been painted, stained, or varnished; and
 - (ii) engineered wood, including plywood, laminated wood, oriented-strand board, and particle board.
 - (5) "Hazardous waste" means material determined to be hazardous waste as specified in K.A.R. 28-31-261.
 - (6) "Household hazardous waste" shall have the meaning specified in K.A.R. 28-29-1100.
 - (7) "Lower explosive limit" and "LEL" mean the lowest percent volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.
 - (8) "Non-C&D waste" means all solid waste that is not specifically defined as construction and demolition waste in K.S.A. 65-3402, and amendments thereto. Non-C&D waste shall include hazardous waste and household hazardous waste.
- (b) If a requirement in K.A.R. 28-29-300 through K.A.R. 28-29-333 conflicts with a requirement of K.A.R. 28-29-12 or K.A.R. 28-29-23, the requirement in K.A.R. 28-29-300 through K.A.R. 28-29-333 shall control. (Authorized by and implementing K.S.A. 65-3406; effective March 17, 2004; amended Dec. 28, 2012.)

28-29-302. Construction and demolition (C&D) landfill location restrictions. This regulation shall apply to each new C&D landfill and to each expansion of an existing C&D landfill that requires a permit modification.

(a) Definitions. For the purposes of this regulation, the following definitions shall apply:

- (1) "Application" shall mean a permit application for a new C&D landfill or a permit modification application for the expansion of an existing C&D landfill.
- (2) "New C&D unit" shall mean a new C&D landfill or the expansion of an existing C&D landfill.

(b) Floodplains.

- (1) Each new C&D unit shall be located outside the 100-year floodplain, unless the applicant submits, as part of the application, one of the following:
 - (A) Justification that the location of the new C&D unit will not cause any of the following:
 - (i) Restriction of the flow of the 100-year flood;

- (ii) reduction of the temporary water storage capacity of the floodplain; or
- (iii) washout of the C&D waste; or
- (B) a statement from the U.S. army corps of engineers, if the site is under their jurisdiction, and the Kansas department of agriculture, division of water resources, stating that neither of the following, occurring as a result of the location of the new C&D unit, will adversely affect public health, safety, or the environment:
 - (i) Restriction of the 100-year flood; and
 - (ii) reduction of the temporary water storage capacity of the floodplain.
- (2) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to the floodplain from the following agencies:
 - (A) The U.S. army corps of engineers; and
 - (B) the Kansas department of agriculture, division of water resources.
- (c) Protection of threatened or endangered species.**
 - (1) For the purposes of this subsection, the following definitions shall apply:
 - (A) "Destruction or adverse modification" means a direct or indirect alteration of critical habitat that appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.
 - (B) "Endangered species" means any species listed as such pursuant to the endangered species act, as referenced in K.S.A. 32-958, and amendments thereto.
 - (C) "Taking" means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in such conduct.
 - (D) "Threatened species" means any species listed as such pursuant to the endangered species act, as referenced in K.S.A. 32-958, and amendments thereto.
 - (2) Each new C&D unit shall be located to meet both of the following requirements:
 - (A) The new C&D unit shall not cause or contribute to the taking of any endangered or threatened species.
 - (B) The new C&D unit shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species.
 - (3) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to threatened or endangered species from the following agencies:
 - (A) The U.S. fish and wildlife service;
 - (B) the Kansas department of wildlife and parks; and
 - (C) the Kansas biological survey.
- (d) Surface waters.**
 - (1) For purposes of this subsection, "surface waters" shall have the meaning specified in K.A.R. 28-16-28b.
 - (2) A new C&D unit shall not be located in any surface waters.
 - (3) A new C&D unit shall not cause or contribute to significant degradation of surface waters. As part of the application, the applicant shall provide the following information:
 - (A) Identification of all surface waters within one-half mile of the property boundary;
 - (B) the erosion, stability, and migration potential of materials used to construct the new C&D unit;
 - (C) the volume and characteristics of the waste to be managed in the new C&D unit;
 - (D) the impact on fish, wildlife, and other aquatic resources and their habitat from the release of C&D waste or C&D contact water;
 - (E) the potential effects of a catastrophic release of C&D waste or C&D contact water to the surface water and the resulting impact on the environment; and
 - (F) additional information relative to the site concerning the protection of ecological resources in surface waters.
 - (4) As part of the application, the applicant shall provide information verifying that the total area of wetlands, as defined by acreage and function, will be preserved by one or more of the following practices:
 - (A) Avoiding impact on the wetlands to the maximum extent practicable;

- (B) minimizing impact on the wetlands to the maximum extent practicable; and
- (C) offsetting unavoidable wetland impact through all appropriate and practicable compensatory mitigation actions, including the restoration of existing degraded wetlands or creation of man-made wetlands.

(5) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to surface waters from the following agencies:

- (A) The U.S. army corps of engineers;
- (B) the U.S. fish and wildlife service;
- (C) the Kansas department of agriculture, division of water resources;
- (D) the Kansas department of wildlife and parks; and
- (E) the Kansas biological survey.

(e) Buffer zones.

- (1) Each new C&D unit shall be located at least 500 feet from each dwelling, school, or hospital that was occupied on the date when the department first received the application, unless the owner of the dwelling, school, or hospital consents in writing to the siting of the C&D unit less than 500 feet from the dwelling, school, or hospital.
- (2) Each new C&D unit shall be located a minimum of 150 feet from the property line.
- (3) The applicant may petition the secretary for a reduction of the buffer zone distances, if the county commission of the county in which the landfill is located approves the request.
- (4) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to buffer zones from the following agencies:
 - (A) The Kansas state conservation commission;
 - (B) the Kansas corporation commission; and
 - (C) the Kansas water office.

(f) Navigable streams and public drinking water supplies.

- (1) Each new C&D unit shall be located according to the requirements of K.S.A. 65-3407, and amendments thereto.
- (2) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to public drinking water supplies from the department's bureau of water.

(g) Vertical separation from groundwater.

- (1) At each new C&D unit, there shall be a minimum vertical separation of five feet from the lowest point of the unit to the highest predicted groundwater elevation, based on historical data or site conditions, in the uppermost aquifer underlying the disposal area. The minimum vertical separation shall be provided by naturally occurring, in-situ soil or geologic material, or alternative material that ensures the protection of public health, safety, and the environment.
- (2) As part of the application, the applicant shall submit one of the following:
 - (A) On-site groundwater elevations and a prediction, based on historical data or site conditions, of the highest groundwater elevation in the uppermost aquifer underlying the disposal area; or
 - (B) other evidence that the highest groundwater elevation in the vicinity is five feet or more from the lowest point of the C&D landfill.

(h) Unstable areas.

- (1) For purposes of this subsection, the following definitions shall apply:
 - (A) "Areas susceptible to mass movement" means those areas of influence, including areas characterized as having active, or a substantial possibility of, mass movement, where the movement of earth material at, beneath, or adjacent to the C&D landfill, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Mass movement shall include the following:
 - (i) Landslides;
 - (ii) avalanches;
 - (iii) debris slides and flows;
 - (iv) solifluction;

(v) block sliding; and

(vi) rock falls.

(B) "Karst terrain" means an area where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. The physiographic features characteristic of karst terrains may include the following:

(i) Sinkholes;

(ii) sinking streams;

(iii) caves;

(iv) large springs; and

(v) blind valleys.

(C) "Poor foundation areas" means those areas where features exist that indicate that a natural or human-induced event could result in inadequate foundation support for the structural components of a C&D landfill.

(D) "Structural components" means liners, leachate collection systems, final covers, run-on systems, runoff systems, and any other component used in the construction and operation of the C&D landfill that is necessary for protection of public health, safety, and the environment.

(E) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the C&D landfill structural components used to prevent releases from a landfill. This term shall include poor foundation areas, areas susceptible to mass movements, and karst terrains.

(2) As part of the application, the applicant for each C&D landfill shall submit an assessment of the stability of the area and shall consider the following factors when determining whether or not an area is unstable:

(A) On-site or local conditions that could result in significant differential settling;

(B) on-site or local geologic or geomorphologic features; and

(C) on-site or local human-made features or events, both surface and subsurface.

(3) As part of the application, the applicant for each C&D landfill proposed to be located in an unstable area shall provide information verifying that engineering measures have been incorporated into the C&D landfill's design to ensure that the integrity of the structural components of the C&D landfill will not be compromised.

(4) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to stability from the Kansas geological survey.

(i) Cultural resources.

(1) Each new C&D unit shall be located so that the unit does not pose a threat of harm or destruction to the essential features of an irreplaceable historic or archaeological site that is listed on the Kansas state register of historic sites, pursuant to K.S.A. 75-2721 and amendments thereto.

(2) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to cultural resources from the Kansas state historical society.

(j) Waivers. The requirement to submit a specific approval, exemption, or demonstration as part of the permit application may be waived by the secretary.

This regulation shall take effect 90 days after publication in the Kansas register. (Authorized by and implementing K.S.A. 65-3406; effective March 17, 2004.)

28-29-304. Construction and demolition (C&D) landfill design. The design requirements of this regulation shall apply to all C&D landfills.

(a) Facility access. The owner or operator of each C&D landfill shall provide fencing or other barriers, with one or more gates that can be locked to restrict access to the C&D landfill when the C&D landfill is not open for business.

(b) Facility signage. The owner or operator of each C&D landfill shall post permanent signage at the facility.

(1) The following information shall be posted at the entrance to the facility:

(A) The name of the facility;

(B) the landfill permit number;

- (C) the facility's telephone number, if there is one;
 - (D) the emergency telephone number; and
 - (E) a statement indicating who may bring waste to the landfill for disposal and, if appropriate, the hours of operation.
- (2) Information concerning the types of waste that are accepted or not accepted for disposal or recycling shall be posted at the facility's entrance or at a location prominently visible to the public inside the facility's boundaries.
- (c) Facility roads.**
- (1) The owner or operator of each C&D landfill shall design and construct on-site roads to accommodate expected traffic flow in a safe and efficient manner.
 - (2) On-site facility roads shall be of all weather construction and shall be negotiable at all times.
 - (3) Load limits on bridges and on-site roads shall be sufficient to support all traffic loads generated by the use of the facility.
- (d) Storm water control.** The owner or operator of each C&D landfill shall design and construct a storm water control system.
- (1) The storm water control system shall prevent flow onto the active area of the landfill of discharge resulting from the 25-year, 24-hour storm and lesser storms.
 - (2) The system shall consist of trenches, conduits, berms, and proper grading, as needed.
 - (3) The system shall control erosion of cover materials.
 - (4) Storm water discharge from the permitted property shall be reduced to predevelopment discharge rates and nonerosive velocities.
- (e) C&D contact water control and management.** The owner or operator of each C&D landfill shall design and construct C&D contact water control and management systems that meet the following requirements:
- (1) The C&D contact water control system shall control storm water runoff from the active area of the C&D landfill.
 - (2) The C&D contact water management system shall meet one or more of the following requirements:
 - (A) Storage of C&D contact water.
 - (i) C&D contact water shall be stored in the permitted C&D waste disposal units, or in structures or ponds on the permitted C&D waste disposal site.
 - (ii) The storage system shall have provisions for overflow.
 - (iii) The storage system may be designed to allow percolation of C&D contact water through subsurface soils.
 - (B) On-site treatment of C&D contact water. The treatment system shall produce water of a quality adequate for the intended use or method of disposal.
 - (C) Beneficial reuse of C&D contact water on the permitted C&D waste disposal site. Beneficial reuse may include the following:
 - (i) Wetting of on-site roads or other site areas for dust control;
 - (ii) irrigation of vegetated areas, not including agricultural crops intended for human or animal consumption;
 - (iii) distribution on C&D waste, as necessary, for fire protection; or
 - (iv) other uses that do not adversely impact public health, safety, and the environment.
 - (D) Discharge or hauling of C&D contact water to an off-site treatment facility.
 - (i) The operator of each C&D landfill may discharge or haul C&D contact water to the off-site treatment facility only with written permission from the owner or operator of the off-site treatment facility. As part of the permit application or permit modification application, the applicant or permittee shall submit a copy of the written permission.
 - (ii) The off-site treatment facility shall have all required permits and approvals required for proper treatment of the C&D contact water. As part of the permit application or permit modification application, the applicant or permittee shall submit a copy of all required permits and approvals.
 - (iii) Discharge of C&D contact water to the off-site treatment facility shall conform with K.A.R. 28-16-1 through K.A.R. 28-16-7.

- (E) Discharge of C&D contact water to surface waters. The applicant or permittee shall be required to obtain a national pollutant discharge elimination system (NPDES) permit from the secretary.
- (F) Discharge of C&D contact water to deep injection wells. The applicant or permittee shall be required to obtain a permit from the secretary for installation and operation of deep injection wells.
- (3) The C&D contact water control and management system shall meet the following requirements:
 - (A) Operate for the entire design period, including the active operating and closure phases of the C&D landfill;
 - (B) allow for the management of C&D contact water during routine maintenance and repairs;
 - (C) have the capacity to handle the water generated from a 25-year, 24-hour storm and lesser storms;
 - (D) operate via gravity flow whenever possible; and
 - (E) be chemically resistant to the contact water expected to be produced.
- (f) Phasing of landfill development.** The owner or operator of each C&D landfill shall develop the landfill in phases, according to the operating plan.
 - (1) The phasing plan shall provide for the sequential construction, filling, and closure of discrete units or parts of units.
 - (2) In determining the size of each phase, the owner or operator shall consider seasonal differences in weather and the amount of C&D waste received.
 - (3) Each phase shall be completed by covering all exposed waste with intermediate cover.
 - (A) The intermediate cover shall consist of a minimum of one foot of soil and shall meet the following requirements:
 - (i) Limit air intrusion to control the risk of fire;
 - (ii) control litter; and
 - (iii) limit vector harborage.
 - (B) Alternative material, if approved by the secretary, may be used for intermediate cover. The alternative material shall consist of material acceptable for disposal in the C&D landfill and shall meet the requirements specified in paragraphs (f)(3)(A)(i) through (f)(3)(A)(iii) of this regulation.
- (g) Final cover.** Within six months after the last placement of waste in the unit, the owner or operator shall construct a final cover in accordance with the approved facility closure plan.
 - (1) The final cover shall include the following:
 - (A) A low-permeability layer consisting of a minimum of 18 inches of compacted soil having permeability equal to or less than the natural subsoils or the constructed liner, and no greater than 1×10^{-5} centimeters per second; and
 - (B) a protective soil layer consisting of a minimum of 12 inches of topsoil and appropriate vegetative cover.
 - (2) The final cover shall be graded with a minimum slope of two percent and a maximum slope of 3:1, horizontal to vertical.

This regulation shall take effect 90 days after publication in the Kansas register. (Authorized by and implementing K.S.A. 65-3406; effective March 17, 2004.)

28-29-308. Construction and demolition (C&D) landfill operations. The owner or operator of each C&D landfill shall comply with the following requirements.

- (a) Aesthetics.** The operator shall control odors and particulates, including dust and litter, by the application of cover material, sight screening, or other means to prevent a nuisance or damage to human health or the environment.
- (b) Air quality.** The owner or operator shall conform to all applicable provisions of K.S.A. 65-3001 et seq., and amendments thereto, and all regulations adopted under those statutes.
- (c) Fire protection.**
 - (1) The owner or operator shall make arrangements for fire protection services if a fire protection district or other public fire protection service is available. If this service is not available, the owner or operator shall provide practical alternate arrangements.
 - (2) If there is a fire at the site, the operator shall perform all of the following:

- (A) Initiate and continue the use of appropriate fire fighting methods until all smoldering, smoking, and burning cease;
- (B) notify the department within one business day and submit a written report to the department within one week; and
- (C) upon completion of fire fighting activities, cover and regrade each disruption of finished grades, covered surfaces, or completed surfaces.

(d) Water management.

- (1) The owner or operator shall construct and maintain the storm water control systems according to the approved design and operating plans.
- (2) The owner or operator shall manage all storm water that becomes commingled with C&D contact water as C&D contact water.
- (3) The owner or operator shall manage all C&D contact water according to the approved design and operating plans. If the contact water control and management system fails, the owner or operator shall notify the department by the end of the next business day.
- (4) The owner or operator shall not cause a discharge of pollutants into the waters of the state. If such a discharge occurs, the owner or operator shall immediately notify the department, as specified in K.A.R. 28-48-2.

(e) Access control.

- (1) Access to each C&D landfill shall be limited to the hours when the owner or operator is at the site.
- (2) The owner or operator shall keep all access-control gates locked when the owner or operator is not at the landfill.
- (3) Access by unauthorized vehicles and pedestrians shall be prohibited.

(f) Waste screening. The owner or operator shall implement the waste screening program designated in the operating plan.

- (1) The operator shall accept for disposal only “construction and demolition waste,” as defined in K.S.A. 65-3402, and amendments thereto.
- (2) The operator shall not accept for disposal any “liquid waste,” as defined in K.A.R. 28-29-108.
- (3) The operator may refuse to accept any material that has not been removed from the delivery vehicle. The operator may return non-C&D waste that has been removed from the delivery vehicle to the hauler. The operator shall document the refusal or return by recording the following information:
 - (A) The date and time of the refusal or return;
 - (B) the driver’s name;
 - (C) the delivery vehicle’s license plate number;
 - (D) the hauling company’s name and address;
 - (E) the origin of the waste;
 - (F) the size of the rejected load or amount of returned waste;
 - (G) the reason for rejection or return; and
 - (H) the name of the person who inspected the waste.
- (4) The operator shall remove from the landfill all non-C&D waste that has not been returned to the hauler, for disposal at a site permitted to accept the non-C&D waste. The operator shall store all non-C&D waste in a manner that does not result in a nuisance or environmental hazard.
- (5) If a regulated hazardous waste, regulated polychlorinated biphenol (PCB) waste, or medical waste is brought to the facility, the owner or operator shall notify the department within one business day and shall meet the following requirements:
 - (A) The notification requirement shall apply to waste that has been accepted at the facility and waste that has been rejected.
 - (B) The notification shall include the type, amount, and source of the waste.
 - (C) The waste shall be managed in accordance with the hazardous waste, PCB, or medical waste regulations, as appropriate.
- (6) The operator shall keep a record of each day that waste is screened at the landfill.

- (7) The waste screening area shall be clearly delineated using flags, signs, or markers, and shall have an area compatible with the average daily volume of waste, as approved in the operating plan.
- (8) The waste screening area shall be cleared of waste no more than 24 hours after the waste has been deposited.
- (9) The operating plan may specify that waste screening may take place at the point of generation rather than at the landfill.

(g) Waste placement.

- (1) At least once each day that waste has been received, the operator shall dispose of the C&D waste using the following method:
 - (A) Screen the waste at a location other than directly on the working face; and
 - (B) distribute the waste uniformly on the working face.
- (2) The operator shall place the waste in a manner and at a rate that provide mass stability during all phases of operation.

(h) Waste compaction.

- (1) The operator shall compact the waste daily, unless an alternate schedule has been designated in the operating plan.
- (2) The operator shall compact the waste as densely as is practical.
 - (A) The degree of compaction may vary depending on the waste type, lift thickness, placement method, and equipment used.
 - (B) The method of compaction shall include at least two passes of compaction equipment over the waste at the time it is placed on the working face or, at a minimum, by the end of the day that the waste is placed on the working face.

(i) Record of waste disposed. The operator shall record and maintain the following information for each load of C&D waste placed in the landfill:

- (1) The tons or volume of C&D waste;
- (2) the state in which the waste was generated; and
- (3) if the waste is exempt from the state solid waste tonnage fee, as specified in K.S.A. 65-3415b and amendments thereto, the reason for the exemption.

(j) Record of waste recycled. The operator shall record and maintain the following information for all waste diverted by the landfill for recycling:

- (1) The type of waste, if any waste other than C&D waste is diverted for recycling;
- (2) the number of tons or the volume of each type of waste;
- (3) the state in which the waste was generated; and
- (4) the name and address of the facility to which the waste was sent for recycling.

(k) Cover requirements.

- (1) The operator shall apply cover material over every 2,000 tons of waste disposed, with the following exceptions:
 - (A) Cover shall be applied at least once every 120 days.
 - (B) No facility shall be required under these regulations to apply cover more often than once a week.
- (2) The cover shall consist of a minimum of one foot of soil and shall meet the following requirements:
 - (A) Limit air intrusion to control the risk of fire;
 - (B) control litter; and
 - (C) limit vector harborage.
- (3) Alternative material, if approved by the secretary, may be used for cover. The alternative material shall consist of material acceptable for disposal in the C&D landfill and shall meet the requirements specified in paragraphs (k)(2)(A) through (k)(2)(C) of this regulation.
- (4) The operator of the facility shall maintain a log of the dates on which cover is applied.

(l) Salvaging.

- (1) The operator shall permit salvaging or reclamation of materials only if working space specifically designed for salvaging C&D wastes is provided.

- (2) The salvage operation and salvaged materials shall be controlled to prevent interference with the prompt disposal of C&D wastes.
- (3) All salvage operations shall be conducted in a manner that does not create a nuisance.
- (m) Scavenging.** The operator shall not permit any scavenging at the C&D landfill.
- (n) Communication.** The owner or operator shall provide two-way communications accessible to the operator working at the disposal unit.
- (o) Safety.** The owner or operator shall provide an operational safety program for each employee at the C&D landfill.
- (p) Recordkeeping.**
 - (1) Long-term retention of permits and plans. The owner or operator shall retain all documents concerning the landfill permit and landfill construction for a minimum of five years after the completion of the postclosure care period. The documents shall be stored in a location designated in the facility operations plan and shall be readily accessible to the department. The documents concerning the landfill permit and landfill construction shall include the following:
 - (A) The permit application and all supporting documents;
 - (B) renewal documents;
 - (C) the construction quality assurance (CQA) plans and reports;
 - (D) additional information as required by the conditions of the permit; and
 - (E) the following documents, which shall be stored at the facility while the facility is active:
 - (i) The current permit;
 - (ii) the permit conditions;
 - (iii) the design plans;
 - (iv) the operations plan;
 - (v) a contingency plan;
 - (vi) the closure plan; and
 - (vii) the postclosure plan.
 - (2) Short-term retention of operating records. The owner or operator shall retain documents concerning operations at the landfill for a minimum of five years after the event occurs. The documents shall be stored at the facility, or at another site designated in the operating plan, and shall be readily accessible to the department. The documents concerning operations at the landfill shall include the following:
 - (A) The waste screening records;
 - (B) the records of refused and returned waste;
 - (C) the records of all waste disposed of, whether on-site or offsite;
 - (D) the records of waste recycled;
 - (E) employee training records;
 - (F) gas monitoring results, if applicable;
 - (G) groundwater monitoring results, if applicable;
 - (H) documentation of postclosure inspections; and
 - (I) additional information as required by the conditions of the permit.
- (q) Reporting.** The owner or operator shall report the following information to the department on forms provided by the department:
 - (1) Disposal information, including the following:
 - (A) The number of tons or the volume of the C&D waste; and
 - (B) the state in which the C&D waste was generated;
 - (2) recycling information, including all of the following:
 - (A) The type of waste, if any waste other than C&D waste was diverted for recycling;
 - (B) the number of tons or the volume of each type of waste;
 - (C) the state in which the waste was generated; and
 - (D) the name and address of the facility to which the waste was sent for recycling;
 - (3) information required for permit renewal; and
 - (4) additional information as required by the conditions of the permit.

This regulation shall take effect 90 days after publication in the Kansas register. (Authorized by and implementing K.S.A. 65-3406; effective March 17, 2004.)

28-29-321. Construction and demolition (C&D) landfill closure and postclosure care. This regulation shall apply to each C&D landfill that closes after the effective date of this regulation.

(a) Notification of closure. The owner or operator of each C&D landfill shall notify the department, in writing, at least 60 days before each of the following events:

- (1) The closure of each disposal unit at the landfill; and
- (2) the final closure of the C&D landfill.

(b) Closure activities.

- (1) The owner or operator of each C&D landfill shall close the landfill according to the approved closure plan and shall install the final cover within six months of the last receipt of waste at the landfill.
- (2) The owner or operator shall notify the secretary when closure activities have been completed and shall arrange for a closure inspection by the secretary.

(c) Postclosure care. After the secretary approves the closure of the C&D landfill, the owner or operator shall conduct postclosure care for 30 years.

- (1) During the postclosure care period, the owner or operator shall perform and document annual inspection and maintenance of the cover to ensure the integrity and effectiveness of the final cover, including the following:
 - (A) Making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, and other events; and
 - (B) preventing run-on and runoff from eroding or otherwise damaging the final cover.
- (2) After five years of inspections, the owner or operator may submit a request to the secretary for a less frequent inspection schedule.

(d) Certification. Following completion of the postclosure care period for the C&D landfill, the owner or operator shall submit a certification to the secretary. The certification shall be signed by a professional engineer licensed in Kansas and shall verify that the postclosure care requirements have been fulfilled in accordance with the postclosure plan.

(e) Lengthened postclosure care period. The length of the postclosure care period may be increased if the secretary determines that the lengthened period is necessary to protect public health, safety, and the environment.

This regulation shall take effect 90 days after publication in the Kansas register. (Authorized by and implementing K.S.A. 65-3406; effective March 17, 2004.)

28-29-325. Construction and demolition (C&D) landfill permits.

(a) Permit application. Each person that plans to establish a C&D landfill shall submit a permit application to the secretary on forms furnished by the department. The permit application shall include the following items:

- (1) Design plans. The C&D landfill design plan shall include the following items:
 - (A) A plan showing the section, township, range, and site boundaries;
 - (B) a description of all adjacent properties, including the land use and the names and addresses of property owners. If the proposed site is adjacent to a public road or street, the property across the street or road shall also be described;
 - (C) a topographic map of the existing site with a contour interval of two feet or less;
 - (D) a minimum of three cross sections of the proposed C&D waste disposal units, with the water table shown;
 - (E) a plan showing the following information:
 - (i) The size and location of all pertinent human-made and natural features of the site, including roads, fire lanes, ditches, berms, culverts, structures, wetlands, floodways, and surface waters;
 - (ii) the projected site utilization with all site structures, including buildings, fences, gates, entrances and exits, parking areas, on-site roadways, and signs; and

- (iii) the location of all water supplies;
 - (F) a series of phasing plans showing landfill development over the life of the landfill. Each plan shall indicate the location of all peripheral features, including support buildings, access roads, drainage ditches, sedimentation basins, all other storm water management features, and screening berms;
 - (G) an erosion control plan outlining management practices to control erosion from disturbed areas;
 - (H) a storm water control plan that includes an implementation schedule and copies of the notice of intent submitted to the department's bureau of water;
 - (I) a C&D contact water management plan that includes an implementation schedule; and
 - (J) if the landfill is located in an unstable area according to the criteria specified in K.A.R. 28-29-302, a description of the engineering measures incorporated into the landfill's design to ensure that the integrity of the structural components of the C&D landfill will not be disrupted.
- (2) Maps. The applicant shall submit the following maps:
- (A) A 7.5-minute series map of the area, as typically available from the U.S. geological survey, indicating the property boundary;
 - (B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services; and
 - (C) a 100-year floodplain map of the area, if one has been developed for the area by the federal emergency management agency (FEMA). If a FEMA map is not available, the applicant shall submit a map showing the estimated location of the 100-year floodplain based on historical or hydrogeologic data.
- (3) Operating plan. The written operating plan shall include the following information:
- (A) The proposed operating hours of the facility;
 - (B) the origin and composition of the waste;
 - (C) the expected daily volume of all C&D waste to be accepted at the facility;
 - (D) the procedures for screening incoming waste for non-C&D waste;
 - (E) the procedures for storing and removing all non-C&D waste from the site for recycling or for disposal at a site permitted to accept the non-C&D waste;
 - (F) a description of all salvaging operations on-site;
 - (G) the procedures for handling appliances that will be disposed of;
 - (H) the procedure for handling nonfriable asbestos;
 - (I) the procedures for placing and compacting the waste;
 - (J) the safety procedures for personnel and public on-site;
 - (K) the cover application rate, including the thickness and frequency of application;
 - (L) the procedures for dust suppression and fugitive emission control at the disposal unit and on haul roads;
 - (M) a description of storm water control measures to be implemented during operation of the facility;
 - (N) a description of the facility's water supply system, including the source and intended uses;
 - (O) a description of all machinery and equipment to be used, including the design capacity;
 - (P) a contingency plan for the following:
 - (i) Emergencies, including fires and spills; and
 - (ii) any other unexpected suspension of operations, including equipment breakdown and personnel emergencies;
 - (Q) a description of when and why the operator would suspend receipt of waste at the facility, including the following:
 - (i) Temporary situations;
 - (ii) final closure due to conditions of the permit; and
 - (iii) attainment of final elevations;
 - (R) a drawing that delineates and numerates phases in the landfill development sequence, along with a written description of the facility development approach and the waste placement progression in individual units;
 - (S) the proposed capacity of the facility; and

- (T) the expected life of the facility.
- (4) Closure plan drawings. The closure plan drawings shall include the following items:
- (A) Surface drawings of the site showing the following information:
 - (i) Access control;
 - (ii) final contours, with a contour interval of two feet or less;
 - (iii) seeding specifications;
 - (iv) landscaping;
 - (v) erosion control devices;
 - (vi) final surface water drainage patterns and runoff retention basins; and
 - (vii) waste disposal locations; and
 - (B) cross sections of the site that depict the following:
 - (i) The disposal or storage locations of wastes;
 - (ii) the type and depth of cover material;
 - (iii) the C&D contact water collection systems, if present; and
 - (iv) any other pertinent features.
- (5) Closure plan text. The closure plan text shall include the following information:
- (A) An estimate of the largest area of the C&D waste disposal unit requiring final cover at any time during the active life of the facility;
 - (B) a description of the steps necessary to close each C&D waste disposal unit at any point during its active life in accordance with the cover design requirements;
 - (C) a schedule for completing all closure activities; and
 - (D) an estimate of the final volume of wastes disposed of at the C&D landfill facility.
- (6) Postclosure plan. The postclosure plan shall include the following:
- (A) A description of the planned uses of the property during the postclosure period. The postclosure use of the property shall not disturb the integrity of the final cover or any other components of the containment system unless either of the following conditions applies:
 - (i) The disturbance is necessary to comply with the requirements in this regulation; or
 - (ii) the owner or operator submits justification that disturbance of the final cover or other components of the containment system, including removal of waste, will not increase the potential threat to public health, safety, or the environment; and
 - (B) a schedule of proposed maintenance activities for the postclosure care period, including the following:
 - (i) Postclosure operation and maintenance of cover material, runoff controls, retention basins, landscaping, and access control and, if present at the facility, the C&D contact water collection system;
 - (ii) the inspections during postclosure; and
 - (iii) the name, address, and telephone number of the person or office to contact about the facility during the postclosure period.
- (7) Restrictive covenant. Each applicant shall file a restrictive covenant or notice of restrictions with the county register of deeds in the county in which the landfill will be located. The restrictive covenant or notice of restrictions shall meet the requirements of K.A.R. 28-29-20.
- (8) Financial information.
- (A) The applicant shall submit the following items on forms provided by the department:
 - (i) A closure cost estimate for third-party costs;
 - (ii) a postclosure estimate for third-party costs, unless exempted by K.A.R. 28-29-2101;
 - (iii) documentation of financial assurance; and
 - (iv) a business concern disclosure statement or public entity disclosure statement.
 - (B) The applicant shall also submit proof of liability insurance.
- (9) Construction quality assurance (CQA) plan. (A) The CQA plan shall include a detailed description of all CQA activities that will be used during construction to manage the installed quality of the facility, including the following items:

- (i) Storm water management structures;
 - (ii) C&D contact water management systems;
 - (iii) base elevations;
 - (iv) final cover; and
 - (v) any other components of the waste containment and management system.
- (B) The CQA plan shall be tailored to the specific facility to be constructed and shall be completely integrated into the project's plans and specifications.
- (C) The CQA plan shall include the responsibilities and qualifications of the CQA personnel.
- (D) The CQA personnel and the CQA certifying professional engineer shall not be required to be employed by an organization that operates independently of the landfill contractor, owner, or permit holder.
- (10) Additional items. Each applicant shall submit to the secretary the following items:
- (A) All demonstrations, approvals, and exemptions required by K.A.R. 28-29-302;
 - (B) all information required by K.A.R. 28-29-304; and
 - (C) the permit application fee, unless exempted by K.S.A. 65-3407 and amendments thereto.
- (b) Permit modifications.**
- (1) Each owner or operator shall notify the secretary, in writing, of all modifications to the approved plans. The owner or operator shall implement each modification only after the secretary has provided written approval of the modification.
 - (2) Each facility that has a permit issued before the effective date of this regulation shall comply with the following within no more than 90 days after the effective date of this regulation:
 - (A) If the facility does not have an operating plan, submit an operating plan to the department;
 - (B) if the facility has an operating plan that does not meet the requirements of subsection (a) of this regulation, submit an amended operating plan;
 - (C) if the facility does not have a design plan, submit a design plan to the department; and
 - (D) if the facility has a design plan that does not meet the requirements of subsection (a) of this regulation, submit an amended design plan.
- (c) Engineer's seal.** The following documents, if submitted as part of a permit application, as part of a permit modification, or a requirement of subsection (b) of this regulation, shall be prepared and sealed by a professional engineer licensed to practice in Kansas:
- (1) Plans;
 - (2) specifications;
 - (3) addendums;
 - (4) as-built drawings; and
 - (5) any other documents required for a permit application or permit modification that describe the design, construction, or closure of a C&D landfill, except financial documents.
- (d) Permit renewal.** The owner or operator of each active C&D landfill shall renew the permit annually by submitting the following information to the secretary at least 30 days before the permit renewal date:
- (1) An updated map of the land area used for past and present waste disposal;
 - (2) updated third-party closure cost estimates;
 - (3) updated third-party postclosure cost estimates, unless exempted by K.A.R. 28-29-2101;
 - (4) documentation of updated financial assurance;
 - (5) a current certificate of liability insurance; and
 - (6) the renewal fee, unless exempted by K.S.A. 65-3407 and amendments thereto. (Authorized by and implementing K.S.A. 65-3406; effective January 4, 2004.)

28-29-330. Control of hazardous and explosive gases at C&D landfills; applicability of additional requirements.

- (a) Applicability of additional design, operating, and postclosure requirements.** The additional design, operating, and postclosure requirements of K.A.R. 28-29-332 shall apply to the owner or operator of each disposal unit at a C&D landfill that meets all of the following conditions:

- (1) Location. Precipitation in all parts of the county in which the C&D landfill is located averages more than 25 inches per year. The following counties and any county located east of these counties shall be designated as meeting this condition: Jewell, Mitchell, Lincoln, Ellsworth, Rice, Reno, Kingman, and Harper.
 - (2) Capacity. The disposal unit meets one of the following conditions:
 - (A) The construction of the disposal unit begins on or after the effective date of this regulation, and the capacity of the disposal unit is more than 50,000 cubic yards. Construction of the disposal unit shall be in accordance with a construction quality assurance plan that is specific to the disposal unit and has been approved by the secretary.
 - (B) The construction of the disposal unit begins on or after January 1, 2014 and the capacity of the disposal unit, in combination with all other disposal units constructed on or after January 1, 2014, is more than 50,000 cubic yards. Construction of the disposal unit shall be in accordance with a construction quality assurance plan that is specific to the disposal unit and has been approved by the secretary.
 - (3) Hydrogeology. The disposal unit meets one or both of the following conditions, as evaluated and documented by a professional engineer or licensed geologist:
 - (A) The disposal unit is located within a 100-year floodplain.
 - (B) The permeability of the natural soils or the constructed soil liner or the natural geologic formation under the disposal unit is 1×10^{-7} centimeters per second or less, including quarry landfills with competent shale bases, unless the owner or operator demonstrates to the department that design and operational practices ensure that C&D contact water will exit the disposal unit by gravity flow.
- (b) Applicability of corrective action requirements. The corrective action requirements of K.A.R. 28-29-333 shall apply to the owner or operator of each C&D landfill during the operating and postclosure periods. (Authorized by and implementing K.S.A. 65-3406; effective Dec. 28, 2012.)

28-29-331. Control of hazardous and explosive gases at C&D landfills; documentation of conditions used to determine applicability. Each person that submits an application for a new C&D landfill and each owner or operator that proposes to construct a disposal unit at an existing C&D landfill shall submit to the department documentation of the conditions specified in K.A.R. 28-29-330, according to the following requirements:

- (a) Required documentation.
- (1) If the C&D landfill meets the location conditions specified in K.A.R. 28-29-330(a)(1), the applicant or the owner or operator shall submit documentation of the capacity of the proposed disposal unit and the capacity of each disposal unit constructed on or after January 1, 2014.
 - (2) If the proposed disposal unit meets the location and capacity conditions specified in K.A.R. 28-29-330(a)(1) and (2), the applicant or the owner or operator shall submit documentation of the hydrogeologic conditions specified in K.A.R. 28-29-330(a)(3). For the purposes of determining the applicability of K.A.R. 28-29-332, if the disposal unit meets one of the hydrogeologic conditions listed in K.A.R. 28-29-330(a)(3), the applicant or the owner or operator shall not be required to submit documentation of the other hydrogeologic conditions.
- (b) Schedule for submission of documentation.
- (1) Each applicant for a new C&D landfill permit shall include the documentation specified in subsection (a) with the permit application.
 - (2) Each owner or operator of an existing C&D landfill that proposes to construct a disposal unit shall submit the documentation specified in subsection (a) on or before the date the construction quality assurance plan for the disposal unit is submitted. (Authorized by and implementing K.S.A. 65-3406; effective Dec. 28, 2012.)

28-29-332. Control of hazardous and explosive gases at C&D landfills; additional design, operating, and postclosure requirements. The owner or operator of each disposal unit at a C&D landfill that meets the conditions of K.A.R. 28-29-330 for determining the applicability of additional design, operating, and postclosure requirements shall comply with the following requirements:

- (a) The owner or operator shall design, construct, and operate the disposal unit to prevent contact water from accumulating in the waste.
- (b) The owner or operator shall perform both of the following:
 - (1) Demonstrate whether it will be necessary to pump contact water out of the landfill after the landfill closes in order to prevent contact water from accumulating in the waste; and
 - (2) include this information in the operating plan.
- (c) If the operating plan states that contact water will be pumped out of the landfill after closure, the owner or operator shall obtain financial assurance for postclosure, according to the requirements of K.A.R. 28-29-2101 through 28-29-2113. (Authorized by and implementing K.S.A. 65-3406; effective Dec. 28, 2012.)

28-29-333. Control of hazardous and explosive gases at C&D landfills; response, assessment monitoring, and corrective action. The owner or operator of each C&D landfill shall comply with the following:

- (a) Identification of potential problem. If the owner or operator observes or is informed of any indication of a release of landfill gas, the owner or operator shall perform the following:
 - (1) Immediately assess the potential danger posed to human health and safety;
 - (2) immediately take all the steps necessary to ensure protection of human health and safety;
 - (3) notify the department of the observation or information within two business days; and
 - (4) in consultation with the department, implement appropriate action to assess the concentrations of gas at the landfill.
- (b) Action levels. The owner or operator shall comply with the requirements of subsection (c) if gas concentrations exceed any of the following levels:
 - (1) For methane, either of the following:
 - (A) 25% of the LEL (1.25% by volume) in any building on the facility property; or
 - (B) 100% of the LEL (5% by volume) at the facility property boundary;
 - (2) for hydrogen sulfide, either of the following:
 - (A) 1 ppm for on-site personnel; or
 - (B) 0.1 ppm in the ambient air at the facility boundary, based on a 15-minute time-weighted average measured when the wind speed is less than 15 mph; or
 - (3) for any gas other than methane or hydrogen sulfide, a level that presents a risk to human health or safety equivalent to the levels listed in paragraphs (1) and (2) of this subsection.
- (c) Response and assessment monitoring. If the concentration of any gas exceeds the levels specified in subsection (b), the owner or operator shall perform the following actions:
 - (1) If an exceedance is found at the facility boundary, immediately notify the local government's public health, environment, and emergency management offices;
 - (2) notify the department within one business day;
 - (3) within one week and in consultation with the department, develop a gas monitoring plan;
 - (4) upon approval of the secretary, implement the gas monitoring plan; and
 - (5) if gas monitoring has continued for one month and the frequency of the exceedances is not decreasing, take long-term corrective action according to the requirements of subsection (d).
- (d) Corrective action. If long-term corrective action is required, the owner or operator shall perform the following actions:
 - (1) Develop and submit to the department a corrective action plan, including provisions for the installation of an active or passive gas management system. The owner or operator shall submit the plan within 60 calendar days of the date the conditions requiring corrective action were met; and
 - (2) upon approval of the secretary, implement the corrective action plan. (Authorized by and implementing K.S.A. 65-3406; effective Dec. 28, 2012.)

28-29-501. Uncontaminated soil. For the purposes of K.S.A. 65-3402 and amendments thereto, "uncontaminated soil" shall mean soil that meets all the following conditions:

- (a) The soil meets the definition of "construction and demolition waste" in K.S.A. 65-3402, and amendments

thereto.

- (b) The soil has not been generated at a facility that is under state or federal oversight for the investigation or cleanup of contamination, unless the state or federal project manager who is providing the oversight approves the use of the soil as clean rubble, as defined in K.S.A. 65-3402 and amendments thereto.
- (c) The soil exhibits no characteristic that would be expected to create either of the following if the soil is managed as clean rubble:
 - (1) An odor or other nuisance that would be offensive to a reasonable person; or
 - (2) an obvious risk to human health or safety or the environment, due to any physical or chemical property of the soil.
- (d) The soil is determined to be suitable for use as clean rubble by one of the following methods:
 - (1) The generator of the soil determines that there is no indication of contamination in the soil. Indication of contamination shall be based on information readily available to the generator of the soil, including the following:
 - (A) The visual appearance of the soil;
 - (B) the odor of the soil; and
 - (C) all known past activities at the site from which the soil is being removed.
 - (2) The generator of the soil obtains analytical data from representative soil samples according to the requirements in subsection (e) and all of the following criteria are met:
 - (A) The soil is not a hazardous waste.
 - (B) Total nitrate plus ammonia is less than 40 mg/kg.
 - (C) The level of total petroleum hydrocarbons is less than N=1, as described in section 5.0 of “risk-based standards for Kansas” (“RSK manual”), published in June 2007 by the department and hereby adopted by reference, including all appendices. The GRO tier 2 value shall be 39 mg/kg and the DRO tier 2 value shall be 2000 mg/kg.
 - (D) If the analyte is a chemical other than nitrate, ammonia, or a petroleum hydrocarbon, all of the following criteria are met:
 - (i) There is no more than one anthropogenic analyte present in the soil. For the purposes of this regulation, the term “anthropogenic analyte” shall mean a chemical or substance present in the environment due to human activity.
 - (ii) The anthropogenic analyte is listed in the KDHE tier 2 risk-based summary table in appendix A of the RSK manual.
 - (iii) The concentration of the anthropogenic analyte is less than the level listed in the KDHE tier 2 risk-based summary table for residential scenarios for the soil pathway or for the soil to ground water protection pathway, whichever is lower.
 - (3) The secretary determines that if the soil is used as clean rubble, the soil will not present a risk to human health or safety or the environment, based on information provided by the generator of the soil. The generator of the soil shall submit the following information to the department:
 - (A) Analytical reports from representative soil samples; and
 - (B) the following information, if requested by the department:
 - (i) Analytical reports indicating naturally occurring background concentrations at the site from which the soil is being removed;
 - (ii) the cumulative cancer risk level of all analytes;
 - (iii) the hazard index value, as defined in K.A.R. 28-71-1, of all analytes; and
 - (iv) any other information required by the department to evaluate the potential risk to human health or safety or the environment.
- (e) If analytical data is used to meet the conditions of this regulation, the following requirements are met:
 - (1) At least one representative sample shall be collected and analyzed for each 500 cubic yards of soil.
 - (2) Each analysis shall be performed and reported by a laboratory that has departmental certification, if this certification is available, for that analysis.
 - (3) Each analytical report shall include the following information:
 - (A) The results of each analysis;

- (B) quality control data;
 - (C) a copy of the chain of custody for each sample; and
 - (D) a statement signed by the generator that the analytical results are representative of the soil.
- (4) The generator shall maintain each analytical report on file for at least three years after the report is received and shall make the report available to the department upon request. (Authorized by K.S.A. 65-3406; implementing K.S.A. 2008 Supp. 65-3402; effective Jan 15, 2010.)

STANDARDS FOR THE MANAGEMENT OF HOUSEHOLD HAZARDOUS WASTE

28-29-1100. Household hazardous waste. General.

- (a) **Applicability.** K.A.R. 28-29-1100 through K.A.R. 28-29-1107 shall apply to each household hazardous waste facility as defined in K.S.A. 65-3402, and amendments thereto. Subsection (f) of this regulation shall apply to collection events that take place at a site that is not a permanent household hazardous waste collection site. The standards in these regulations shall not exempt any materials from applicable state or federal regulations that are more stringent than these regulations. In each case where the requirements of the household hazardous waste regulations K.A.R. 28-29-1100 to K.A.R. 28-29-1107 conflict with the requirements of the administrative procedure and solid waste management regulations in K.A.R. 28-29-6 through K.A.R. 28-29-23, the requirements of K.A.R. 28-29-1100 to K.A.R. 28-29-1107 shall control.
- (b) **Definitions.** For the purposes of these regulations, the following definitions shall apply:
- (1) “Household hazardous waste” or “HHW” means household waste that would be determined to be hazardous waste according to ~~K.A.R. 28-31-4 (b)~~ K.A.R. 28-31-261 if the waste were not household waste. *[Note: modified by 28-29-1a]*
 - (2) “Nonhazardous household waste” or “NHHW” means household waste that is not HHW.
 - (3) ~~“Small quantity generator”~~ “Conditionally exempt small quantity generator” shall have the meaning specified in ~~K.A.R. 28-31-2~~ K.A.R. 28-31-260a. *[Note: modified by 28-29-1a]*
 - (4) “USDOT hazard class or division” means the hazard class or division ~~defined by the United States department of transportation and adopted by reference in K.A.R. 28-31-4 (e)~~ as listed in 49 CFR 173.2, as in effect on October 1, 2009, which is hereby adopted by reference. *[Note: modified by 28-29-1a]*
- (c) **Used oil.** Each HHW facility that accepts used oil from household do-it-yourselfers or exempt farmers shall manage the used oil in accordance with ~~K.A.R. 28-31-16~~ K.A.R. 28-31-279 and K.A.R. 28-31-279a upon receipt of the used oil at the HHW facility’s central collection center. Each HHW facility that accepts used oil from businesses shall manage the used oil in accordance with ~~K.A.R. 28-31-16~~ K.A.R. 28-31-279 and K.A.R. 28-31-279a from the point of generation. *[Note: modified by 28-29-1a]*
- (d) ~~Small quantity generator (SQG)~~ **Conditionally exempt small quantity generator (CESQG) waste.** Each HHW facility that is permitted to accept ~~SQG~~ CESQG waste shall manage all ~~SQG~~ CESQG waste that is not hazardous waste in the same manner as that for nonhazardous household waste and shall manage all ~~SQG~~ CESQG hazardous waste in the same manner as that for HHW. *[Note: modified by 28-29-1a]*
- (e) **Other hazardous waste.** Any HHW facility may accept hazardous waste from a source other than a household or an ~~SQG~~ CESQG in an emergency, if the facility’s operating plan contains procedures to follow in such an emergency. *[Note: modified by 28-29-1a]*
- (f) **Temporary collection events.** Each temporary collection event at a fixed site shall be conducted only under the direct supervision of a permitted HHW facility or in accordance with a plan approved by KDHE. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000 .)

28-29-1101. Household hazardous waste facility design. The owner or operator of each HHW facility shall perform the following:

- (a) Design and construct each access road to accommodate expected traffic flow in a safe and efficient manner;
- (b) construct the floor or base of each household waste receiving area and each processing area of concrete or asphalt;
- (c) design and construct each storage area for household waste, except used oil stored in tanks, with a weather-resistant, permanent roof; and

- (d) provide secondary containment for all HHW stored for disposal or recycling. The secondary containment shall be capable of containing either 110 percent of the volume of the largest container or 10 percent of the total volume of all the containers, whichever is greater. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

28-29-1102. Household hazardous waste facility operations.

(a) Nonhazardous household waste.

- (1) Each HHW facility operator shall store and manage all NHHW according to the facility's operating plan and the following requirements:
- (A) Place the NHHW in the designated area, as described in the facility operating plan, within one week after it is received;
 - (B) ensure that each NHHW storage container or each NHHW storage area has a label or sign designating its contents;
 - (C) when NHHW is present, inspect all NHHW storage areas weekly to assess waste volume and container integrity, and document these inspections in a log that is dated and either signed or initialed by the person who conducted the inspection; and
 - (D) store NHHW to be distributed for use in a manufacturer's original container or, for latex paint, in a compatible container provided by the HHW facility. Each container that will be distributed for use shall be labeled, closed, and nonleaking.
- (2) Each HHW facility operator shall distribute for use, recycling, or disposal all NHHW accepted by the facility according to all of the following requirements:
- (A) NHHW may be distributed for use in a manner equivalent to its originally intended purpose.
 - (B) NHHW may be disposed of in a permitted municipal solid waste landfill. However, latex paint and all other liquids shall be disposed of in a permitted municipal solid waste landfill only if one of the following conditions is met:
 - (i) The paint or other liquid is solidified.
 - (ii) The paint or other liquid is in the original container, and the volume of the container is no greater than five gallons.
 - (C) NHHW may be disposed of in a sanitary sewer connected to a publicly owned treatment works with written authorization from the operators of the publicly owned treatment works.
 - (D) The HHW facility may choose to manage certain types of NHHW, as described in the facility's operating plan, according to the requirements in subsection (b) of this regulation.

(b) Household hazardous waste.

- (1) Each HHW facility operator shall store and manage all HHW according to the facility's operating plan and all of the following requirements:
- (A) Place the HHW in the designated area, as described in the facility operating plan, within one week after it is received. Sort and segregate all HHW, except HHW that will be distributed for use, by U.S. department of transportation hazard class or division;
 - (B) except for HHW that will be distributed for use, mark each HHW storage container or each segregated HHW storage area according to U.S. department of transportation hazard class or division;
 - (C) keep all storage containers that are in direct contact with HHW closed, except when adding or removing waste;
 - (D) when HHW is present, inspect all HHW storage areas weekly to assess waste volume and container integrity, and document these inspections in a log that is dated and either signed or initialed by the person who conducted the inspection; and
 - (E) store HHW that will be distributed for use in a manufacturer's original container. Each container that will be distributed for use shall be labeled, closed, and nonleaking.

- (2) Each HHW facility operator shall distribute for use, recycling, or disposal all HHW accepted by the facility according to all of the following requirements:
- (A) HHW may be distributed for use in a manner equivalent to its originally intended purpose.
 - (B) All HHW that is transferred for treatment, storage, or disposal shall be transferred to a permitted hazardous waste treatment, storage, or disposal facility by a registered hazardous waste transporter.
 - (C) ~~All HHW that is transferred for treatment, storage, or disposal shall be manifested as hazardous waste as described in K.A.R. 28-31-4 (d), with the following changes:~~
 - (i) ~~For the purposes of paragraph (b)(2)(C) of this regulation, “Kansas or EPA generator” shall be replaced with “HHW facility operator,” and “hazardous waste” shall be replaced with “HHW” in K.A.R. 28-31-4 (d).~~
 - (ii) ~~All applicable hazardous waste codes for each waste shall be listed on the manifest, using all available information. HHW facilities shall not be required to submit samples for laboratory testing in order to determine hazardous waste codes.~~ All HHW that is transferred for treatment, storage, or disposal shall be manifested as hazardous waste. All applicable hazardous waste codes for each waste shall be listed on the manifest, using all available information. HHW facilities shall not be required to submit samples for laboratory testing in order to determine hazardous waste codes. *[Note: modified by 28-29-1a]*
 - (D) All HHW that is transferred for treatment, storage, or disposal shall be subject to the hazardous waste land disposal requirements specified in ~~K.A.R. 28-31-14~~ K.A.R. 28-31-268. *[Note: modified by 28-29-1a]*
 - (E) ~~All HHW that is transferred for treatment, storage, or disposal shall be prepared for transportation off-site as specified in K.A.R. 28-31-4 (e). For the purposes of this paragraph, “Kansas or EPA generator” shall be replaced with “HHW facility operator,” and “hazardous waste” shall be replaced with “HHW” in K.A.R. 28-31-4 (e).~~ All HHW that is transferred for treatment, storage, or disposal shall be prepared for transportation off-site as hazardous waste. *[Note: modified by 28-29-1a]*
 - (F) The requirements of paragraphs (b)(2)(B) through (b)(2)(E) of this regulation shall not apply to the following wastes:
 - (i) HHW that is transferred to a universal waste facility and packaged and labeled in accordance with ~~K.A.R. 28-31-15~~ K.A.R. 28-31-273; *[Note: modified by 28-29-1a]*
 - (ii) antifreeze that is transferred to a commercial collector under the conditions of an agreement to recycle the antifreeze;
 - (iii) HHW that is disposed of in the sanitary sewer connected to a publicly owned treatment works with written authorization from the operators of the publicly owned treatment works. HHW shall not be discharged to storm sewers or septic systems;
 - (iv) containers that have been emptied to the fullest practical extent and are disposed of in a permitted municipal solid waste landfill;
 - (v) HHW that is transferred between HHW facilities; and
 - (vi) other waste, as approved by the department.
- (c) Storage.** Each HHW facility operator shall maintain the quantity of stored material at or below the facility’s permitted storage capacity.
- (d) Signs.** Each HHW facility operator shall post a sign outside of the facility that includes the following information:
- (1) The name of the facility;
 - (2) the hours and days of operation;
 - (3) the name of the permit holder;
 - (4) the telephone number of an emergency contact available during nonoperating hours; and
 - (5) the permit number.

- (e) **Training.** All HHW facility managers, employees, and volunteers that are responsible for sorting, segregating, or processing HHW shall receive a minimum of 24 hours of classroom training related to the proper handling of hazardous materials and shall receive a minimum of eight hours of annual refresher training. Education or experience may be substituted for the required training, subject to departmental approval. No person shall sort, segregate, or process HHW without on-site supervision before receiving this training. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

28-29-1103. Mobile HHW collection units. Each permitted facility that transports HHW from a temporary collection site or from a satellite HHW facility to a permitted HHW facility shall perform the following:

- (a) Clearly mark "Household hazardous waste" on both sides of the mobile collection unit;
- (b) separate all HHW by USDOT hazard class or division before transport;
- (c) lab pack or overpack the household waste in containers ~~meeting the USDOT manufacturing and testing specifications for transportation of hazardous materials, as adopted by reference in K.A.R. 28-31-4 (e) that are compatible with the waste.~~ *[Note: modified by 28-29-1a]*
- (d) label the containers with a USDOT hazard class or division label or sign;
- (e) seal and secure all containers for transport; and
- (f) during transportation, carry a bill of lading describing the USDOT hazard class or division and the approximate quantities of the contents of the mobile collection unit. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

28-29-1104. Satellite HHW facilities.

- (a) "Satellite HHW facility" shall mean any permanent HHW collection site, located away from the central collection center, that is part of a permitted HHW program.
- (b) Each person who owns or operates a satellite HHW facility shall meet all of the following requirements:
 - (1) The HHW satellite facility shall be described in the approved operating plan of the permitted HHW facility or facilities with which the satellite HHW facility is associated.
 - (2) The owner or operator of the satellite HHW facility shall submit an operating plan, a facility drawing, and a description of any HHW storage cabinets to the department.
 - (3) A copy of each bill of lading used for transporting HHW to the central collection center shall be maintained at the satellite HHW facility for a period of three years.
- (c) Each person who owns or operates a satellite HHW facility using storage cabinets shall meet all of the following requirements:
 - (1) A minimum of two and a maximum of four HHW storage cabinets, including at least one for flammables and one for corrosives, shall be used at each satellite HHW facility.
 - (2) Each HHW storage cabinet shall be designed for the HHW stored in it.
 - (3) Each HHW storage cabinet shall have a storage capacity of not more than 120 gallons.
 - (4) All HHW shall be properly segregated and stored within the appropriate storage cabinets by the end of the working day.
 - (5) If HHW is present, the facility owner or operator shall inspect all HHW storage areas weekly to assess waste volume and container integrity, and shall document these inspections in a log that is dated and either signed or initialed by the person who conducted the inspection.
 - (6) Not more than one week after the storage capacity has been reached, the owner or operator shall make arrangements to remove the HHW stored in HHW storage cabinets. HHW stored in HHW storage cabinets shall be removed at least once a year. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

28-29-1105. HHW reporting and recordkeeping.

- (a) The owner or operator of each HHW facility shall submit an annual report to the department on a form furnished by the department.

- (b) The owner or operator of each HHW facility shall maintain a copy of the approved design plan, closure plan, and all modifications to the plans, at the facility or at another location designated in the facility operating plan, until the facility closes.
- (c) The owner or operator of each HHW facility shall maintain at the facility a copy of the approved operating plan and all modifications to the plan, until the facility closes.
- (d) The owner or operator of each HHW facility shall maintain the following records at the facility or at another location designated in the facility operating plan, for at least three years:
 - (1) Copies of the annual report;
 - (2) training records;
 - (3) bills of lading;
 - (4) hazardous waste manifests;
 - (5) land disposal restriction notifications;
 - (6) weekly inspection records; and
 - (7) notification of changes to approved design, operations, and closure plans. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

28-29-1106. HHW facility closure. The owner or operator of each HHW facility shall meet the following requirements:

- (a) Notify the department at least 60 days before beginning closure;
- (b) remove all household waste within 90 days after last receiving waste; and
- (c) submit to the department certification that the facility has closed in accordance with the specifications in the approved closure plan. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

28-29-1107. HHW permits.

- (a) Each person that plans to establish an HHW facility shall submit a permit application to the department on a form supplied by the department. The applicant shall include with the permit application the following items:
 - (1) Facility design plan. The facility design plan shall include all of the following information:
 - (A) The type, size, and location of the facility;
 - (B) a regional plan or a map showing the service area;
 - (C) a vicinity plan or map that depicts the following features and information:
 - (i) Residences, wells, surface waters, and access roads within 0.5 mile of the site boundaries, and any other existing or proposed man-made or natural features relating to the project;
 - (ii) adjacent zoning and land use; and
 - (iii) evidence that the facility will not be located within the 100-year floodplain;
 - (D) a topographic map showing elevation contours;
 - (E) a site plan depicting the following features:
 - (i) On-site and off-site utilities, including electricity, gas, and water;
 - (ii) storm and sanitary sewer systems;
 - (iii) right-of-ways; and
 - (iv) the location of buildings and appurtenances, fences, gates, roads, paved lots, parking areas, drainage, culverts, and signs; and
 - (F) detailed plans depicting the following features:
 - (i) Building elevation and plan view;
 - (ii) building floor plans, shelving plans, appurtenances, and necessary detail sections to include electrical and mechanical systems;
 - (iii) designated areas for activities to be conducted at the facility, including receipt, segregation, bulking, distribution, packaging, and storage of household waste; and
 - (iv) entrance area gates, fencing, and signs.
 - (2) Operating plan. The operating plan shall contain the following information:

- (A) The activities to be conducted at the facility, including receipt, segregation, bulking, packaging, storage, and distribution of household waste;
 - (B) the activities to be conducted off-site, including operation of mobile collection units, curbside collection, and satellite storage facilities;
 - (C) the procedures for handling ignitable or reactive waste;
 - (D) the procedures for identifying and managing ~~small quantity generator~~ conditionally exempt small quantity generator waste; *[Note: modified by 28-29-1a]*
 - (E) the duties and responsibilities of facility personnel;
 - (F) the training program and requirements for the different types of facility personnel; and
 - (G) the emergency response plan for events including spills, fires, equipment failure, power outages, natural disasters, receipt of prohibited materials, and other similar interruptions of normal activities.
- (3) Closure plan. The closure plan shall contain the following information:
- (A) The procedure for removing and disposing of waste at closure;
 - (B) the procedure for cleaning the facility;
 - (C) the schedule for closure; and
 - (D) the closure cost estimate on a form supplied by the department.

(b) Modifications to plans. The owner or operator shall notify the department, in writing, of all modifications to the approved plans before the implementation of modifications. Modifications submitted to the department shall be effective 28 calendar days after the date the modification notice is received by the department, unless the department notifies the owner or operator that the modification will require further review before it can be approved. Changes to approved plans shall not conflict with any provision of K.A.R. 28-29-1100 through K.A.R. 28-29-1107. (Authorized by and implementing K.S.A. 1999 Supp. 65-3406 and 65-3460; effective June 16, 2000.)

LAND-SPREADING OF DRILLING WASTE

28-29-1600. Land-spreading; definitions and adoptions.

- (a) As used in K.A.R. 28-29-1600 through K.A.R. 28-29-1608, each of the following terms shall have the meaning specified in this regulation:
- (1) "Application" means land-spreading application. This term shall include the forms provided by the KCC and all other required submissions.
 - (2) "Department" means Kansas department of health and environment.
 - (3) "Drilling waste" means used drilling mud and cuttings generated by the drilling of oil and gas wells or related injection wells that are permitted by the KCC or by the equivalent permitting authority in the state in which the well is located. This term shall not include hydraulic fracturing fluids.
 - (4) "GPS" means global positioning system.
 - (5) "Habitable structure" means any structure that is occupied by humans or maintained in a condition that allows it to be occupied by humans. This term shall include dwellings, churches, schools, care facilities, public buildings, office buildings, commercial buildings, and industrial buildings.
 - (6) "KCC" means Kansas corporation commission.
 - (7) "Land-spreading" means the disposal of drilling waste by spreading the drilling waste on the land. This term shall not include the use of drilling waste as a product, as described in K.S.A. 65-3409 and amendments thereto, including the use of drilling waste in the construction and maintenance of roads and ponds.
 - (8) "Land-spreading worksheet" means the land-spreading rate calculation worksheet provided by the KCC.
 - (9) "NORM" means naturally occurring radioactive material.
 - (10) "NORM level" means the concentration of residual NORM radium-226 and radium-228 and their progeny as measured in becquerels per kilogram (Bq/kg) or picocuries per gram (pCi/g).
 - (11) "Operator" means operator, as defined in K.A.R. 82-3-101, of each well that generated the drilling waste.
 - (12) "Secretary" means secretary of health and environment.

(13) “Water-based drilling mud” means drilling mud that meets both of the following conditions:

(A) The drilling mud consists primarily of bentonite suspended in water.

(B) The liquid component of the drilling mud consists of no more than six percent oil or any oil derivative, including diesel fuel and asphalt blend oil.

(b) The following documents are hereby adopted by reference:

(1) “Standard test method for particle-size analysis of soils,” D422-63, published October 2007 by ASTM international; and

(2) section 3.2 on pages 40 through 65 of “soil survey field and laboratory methods manual,” soil survey investigations report no. 51, version 1.0, issued in 2009 by the U.S. department of agriculture, natural resources conservation service. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1601. Land-spreading; general requirements.

(a) No person may land-spread without having obtained prior written approval from the KCC. Before drilling, each operator that wants to land-spread shall submit an application to the KCC.

(b) If the proposed land-spreading disposal area is more than 160 acres, the operator shall submit two or more applications for the disposal area. Each application shall describe no more than 160 acres.

(c) The approval shall remain in effect for three years after the date on which land-spreading commenced, with the following exceptions:

(1) If land-spreading has not commenced within one year after the approval is granted, the approval shall expire.

(2) One or more one-year extensions to the approval may be granted by the director of the KCC’s conservation division based on the following:

(A) Certification from the operator that the information in the approved application has not changed; and

(B) the operator’s history of compliance with the requirements of K.A.R. 28-29-1600 through 28-29-1608.

(d) Drilling waste from multiple wells may be disposed of on the approved land-spreading site during the approved disposal period. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1602. Land-spreading; application. Each operator that submits an application shall provide the operator name and the lease name on each part of the application that is not submitted directly on the forms provided by the KCC. The operator shall include the following items in the application:

(a) A nonrefundable application fee, as specified in K.S.A. 65-3407c and amendments thereto;

(b) certification that the drilling waste or the disposal site meets each of the following conditions:

(1) The drilling mud that will be used in each well that produces the drilling waste is water-based drilling mud;

(2) the predicted NORM level of the drilling waste meets the requirements of K.A.R. 28-29-1604. The operator shall submit an affidavit and supporting documentation as required by K.A.R. 28-29-1602(d)(7);

(3) no land-spreading has occurred at the disposal site in the past three years;

(4) the chloride concentration in the soil at the disposal site meets the requirements of K.A.R. 28-29-1604;

(5) the location of the disposal site meets the buffer zone requirements of K.A.R. 28-29-1604;

(6) the maximum slope at the site is eight percent or less;

(7) the depth of unconsolidated material at the surface is at least 24 inches;

(8) the soil at the site meets the requirements of K.A.R. 28-29-1604;

(9) based on historical data or site conditions, the groundwater elevation in the uppermost aquifer underlying the disposal site is at least 10 feet below the ground surface;

(10) if the disposal site is irrigated, the chloride concentration of the irrigation water is less than 350 ppm; and

(11) there is no chloride groundwater contamination below the disposal site, based on the chloride

- contamination map provided by the department;
- (c) for the operator, the following information:
- (1) Operator license number;
 - (2) name;
 - (3) mailing address; and
 - (4) the following information about the contact person for the application:
 - (A) Name;
 - (B) telephone number;
 - (C) facsimile number, if available; and
 - (D) electronic mail address, if available;
- (d) for each well from which drilling waste will be generated, the following information:
- (1) If the well is permitted in a state other than Kansas, the name and telephone number of the state authority that permitted the well;
 - (2) the location of the well, including the following:
 - (A) The state and county in which the well is located;
 - (B) the legal description of the well;
 - (C) the number of feet the well is located from the north or south section line and the east or west section line; and
 - (D) the latitude and longitude of the well, which shall be determined using GPS;
 - (3) the lease name;
 - (4) the well number;
 - (5) the American petroleum institute (API) number;
 - (6) the expected spud date, as defined in K.A.R. 82-3-101;
 - (7) an affidavit on a form provided by the KCC, according to the following requirements:
 - (A) The operator shall certify that the predicted NORM level of the drilling waste meets both of the following conditions:
 - (i) The maximum predicted NORM level in the drilling waste is no more than 1.5 times the highest NORM level found in drilling waste samples collected from Kansas wells. A summary of NORM levels found in drilling waste samples collected from Kansas wells shall be maintained by the department and provided to any person upon request; and
 - (ii) the maximum predicted NORM level in the drilling waste is no more than 370 Bq/kg (10 pCi/g);
 - (B) the operator shall make the certification based upon data from wells drilled through the same geological formations as those of the well identified in the land-spreading application; and
 - (C) the operator shall include on the affidavit the maximum predicted NORM level of the drilling waste, according to the following:
 - (i) If the well will be drilled through formations for which the department has summarized and provided data, the operator may use this data to determine the maximum predicted NORM level of the drilling waste;
 - (ii) if the well will be drilled through formations for which the department has not summarized and provided data, the operator shall submit to the KCC all information available to the operator that can be used to predict the maximum NORM level in the drilling waste; and
 - (iii) if the NORM level of a formation is dependent on geographic location, the operator shall use that information to determine the maximum predicted NORM level of the drilling waste;
 - (8) a list of the expected components of the drilling mud and a detailed list of all additives, including the product name and the constituents of each additive; and
 - (9) a sampling and analysis plan that meets the requirements of K.A.R. 28-29-1605 to determine the chloride concentration of the drilling waste. The plan shall describe the following:
 - (A) The sampling rate;
 - (B) the procedures that will be used to collect the samples; and
 - (C) the procedures that will be used to prepare the samples for analysis;
- (e) for the proposed disposal site, the following information:

- (1) The name and mailing address of the property owner;
- (2) the size of the site, as measured in acres;
- (3) the legal description of the site;
- (4) a description of current land use at the site and surrounding areas;
- (5) documentation of all land-use restrictions and zoning restrictions for the site;
- (6) documentation of all local permits that are required for land-spreading at the site;
- (7) the distance and direction from the site to the nearest habitable structure;
- (8) if the site is irrigated, the chloride concentration in the irrigation water in parts per million. The concentration shall be determined by a laboratory that is accredited for chloride analysis by the secretary;
- (9) the depth to the water table and a description of how the depth was determined;
- (10) the direction of groundwater flow under the site, if known;
- (11) an aerial map of the site. The map shall be detailed enough to locate the site or to determine directions to the site from the nearest highway and shall include the following:
 - (A) A north arrow and scale;
 - (B) the location of the site and the property boundaries; and
 - (C) each of the following features if that feature is located within one-half mile of the site:
 - (i) Habitable structures;
 - (ii) waters of the state;
 - (iii) perennial and intermittent streams;
 - (iv) ponds, lakes, and wetlands;
 - (v) domestic water wells;
 - (vi) municipal wells;
 - (vii) drainage swales, ditches, and all other physical features that channel overland flow; and
 - (viii) all other relevant features;
- (12) a topographic map of the site that shows the slope of the ground to be used for land-spreading;
- (13) a cell identification map that shows a grid dividing the site into cells. Each cell shall cover an area of no more than 10 acres. The map shall include the following information:
 - (A) The legal description of the site;
 - (B) the county in which the site is located;
 - (C) delineation of the boundary of the land-spreading area and each cell within the land-spreading area, based on one or both of the following:
 - (i) Physical references and measurements; or
 - (ii) GPS measurements;
 - (D) a unique label for each cell;
 - (E) the location of each soil sample that was collected to provide information for the application;
 - (F) the chloride concentration of the soil within each cell, as determined according to the requirements of K.A.R. 28-29-1603;
 - (G) the soil texture or textures of the site, as determined according to the requirements of K.A.R. 28-29-1603;
 - (H) the depth of unconsolidated material at the site;
 - (I) the areas that receive irrigation;
 - (J) the areas where vegetation will be established;
 - (K) the areas where conditions to support crops will be established;
 - (L) the areas where land restoration, other than establishing vegetation or conditions to support crops, is planned;
 - (M) the property boundaries;
 - (N) the ownership and use of adjacent properties; and
 - (O) the buffer zones required by K.A.R. 28-29-1604;
- (14) documentation and analyses supporting all of the chloride concentration and soil texture information provided on the cell identification map, including laboratory chain-of-custody documents; and

- (15) a copy of the United States department of agriculture's soil survey map for the site;
- (f) documentation that the owner of the proposed disposal site has agreed to the land-spreading, which shall be submitted on a form provided by the KCC;
- (g) a site access agreement that grants access to the proposed disposal site to the department and the KCC for the purposes of observation, inspection, and sampling, which shall be submitted on a form provided by the KCC;
- (h) a description of the proposed land-spreading procedures, including descriptions of the following:
 - (1) The manner in which the drilling waste will be stored at the site of generation;
 - (2) the processes and equipment that will be used to spread the drilling waste at the land-spreading site;
 - (3) the manner in which the equipment will be operated to ensure that the drilling waste is spread at the approved rate. The description shall include information on the boom width, flow rate, ground speed, and all other factors that will be used to control the land-spreading rate; and
 - (4) if the operator is required by K.A.R. 28-29-1607 to incorporate the drilling waste into the soil, the processes and equipment that will be used to incorporate the drilling waste into the soil;
- (i) a contingency plan that describes how drilling waste will be managed if land-spreading is not allowed due to either of the following:
 - (1) Weather restrictions; or
 - (2) the drilling waste exceeding the composition limitations specified in K.A.R. 28-29-1607;
- (j) a plan describing how the land-spreading area will be restored after land-spreading, including establishment of vegetation or conditions to support crops. If the land-spreading area is not cropland, the plan shall include the erosion-control measures that will be implemented until vegetation is established; and
- (k) any other relevant information required by the KCC to evaluate the application. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1603. Land-spreading; sampling and analysis of soils. Each operator that submits an application to the KCC shall meet all of the following requirements:

- (a) **Sample collection for chloride analysis.** For each cell, as identified on the cell identification map submitted with the application, at least four representative core samples shall be collected according to the following requirements:
 - (1) Each core shall sample the top 12 inches below the surface.
 - (2) For each cell, all samples from that cell shall be combined and thoroughly mixed.
 - (3) The combined samples from each cell shall have a volume of at least one pint.
 - (4) The label of each sample shall match the unique label of the cell from which the sample was collected, as indicated on the cell identification map submitted with the application.
- (b) **Chloride analysis.** The soil shall be analyzed for chloride concentration by a laboratory that meets one or both of the following conditions:
 - (1) The laboratory is accredited for chloride analysis by the secretary.
 - (2) The laboratory is a participant in the North American proficiency testing program for chloride analysis.
- (c) **Sample collection for soil texture analysis.** For each cell, as identified on the cell identification map submitted with the application, core samples from at least four representative sampling locations shall be collected according to the following requirements:
 - (1) Each core or set of cores shall sample at least the top 24 inches below the surface.
 - (2) Each sampling location shall be continuously sampled from the ground surface to the total depth required to provide the information for the application.
 - (3) Each core or set of cores shall provide a minimally disturbed profile of the soil at that sampling location.
 - (4) Soil samples shall not be combined with samples from other locations.
 - (5) Each core shall be labeled in a manner that corresponds to the unique label of the cell from which the core was collected, as indicated on the cell identification map submitted with the application.
- (d) **Soil texture analysis.** The soil texture shall be determined by one of the following:
 - (1) An agronomist with at least a bachelor of science degree in agronomy or a soil scientist with at least a bachelor of science degree in soil science. The agronomist or soil scientist shall perform the following:

- (A) Evaluate the site in person;
- (B) determine the soil texture using the feel method described in “soil survey field and laboratory methods manual,” which is adopted by reference in K.A.R. 28-29-1600; and
- (C) provide documentation characterizing the site; or
- (2) a laboratory, according to one or both of the following requirements:
 - (A) The laboratory shall analyze the soil using methods described in section 3.2 of the “soil survey field and laboratory methods manual,” as adopted by reference in K.A.R. 28-29-1600, and shall be a participant in the North American proficiency testing program for those methods; or
 - (B) the laboratory shall analyze the soil using the method described in “standard test method for particle-size analysis of soils,” as adopted by reference in K.A.R. 28-29-1600, and shall be accredited by the American association of state highway and transportation officials (AASHTO) materials reference laboratory (AMRL) proficiency sample program for that method.
- (e) **Soil texture classification.** Each soil sample shall be classified by texture class or subclass according to the texture class table and the texture triangle on page 45 of the “soil survey field and laboratory methods manual,” as adopted by reference in K.A.R. 28-29-1600. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1604. Land-spreading; conditions for disposal. Disposal of drilling waste by land-spreading shall be approved by the KCC only if the operator has certified, and provided supporting documentation if required by K.A.R. 28-29-1602, that the drilling waste and the disposal site meet all of the following conditions:

- (a) **Drilling waste.** The drilling waste meets both of the following conditions:
 - (1) The drilling mud that will be used in each well that will produce the drilling waste is water-based drilling mud.
 - (2) The predicted NORM level, as defined in K.A.R. 28-29-1600, meets both of the following conditions:
 - (A) The maximum predicted NORM level is no more than 1.5 times the highest NORM level found in drilling waste samples collected from Kansas wells.
 - (B) The maximum predicted NORM level is no more than 370 Bq/kg (10 pCi/g).
- (b) **Previous land-spreading.** No land-spreading has occurred at the disposal site in the past three years.
- (c) **Soil chloride concentration.** The chloride concentration in the soil at the disposal site is less than the following:
 - (1) 300 parts per million (ppm) if the disposal site has previously been used for land-spreading; and
 - (2) 500 ppm if the disposal site has not previously been used for land-spreading.
- (d) **Buffer zones.** The disposal site is located as follows:
 - (1) At least 100 feet from each of the following:
 - (A) Each intermittent stream; and
 - (B) each drainage swale, ditch, or other physical feature that channels overland flow;
 - (2) at least 200 feet from each of the following:
 - (A) The property boundary, unless the adjacent property ownership and use are the same as the property ownership and use of the disposal site;
 - (B) each perennial stream; and
 - (C) each freshwater pond, lake, and wetland;
 - (3) at least 500 feet from each habitable structure;
 - (4) at least 1,000 feet from each water well that is being used or could be used for domestic or agricultural purposes. If the applicant demonstrates to the KCC that the disposal site is hydrogeologically downgradient from the water well, this distance may be reduced to 500 feet; and
 - (5) one-half mile or more from each actively producing water well that is used for municipal purposes.
- (e) **Physical characteristics.** The disposal site meets the following conditions:
 - (1) The maximum slope at the site is eight percent or less.
 - (2) The depth of unconsolidated material at the surface is at least 24 inches.
 - (3) Within the top six feet below the surface, there is at least one layer of soil that meets all of the following conditions:

- (A) Is continuous across the site;
- (B) is at least 12 inches thick;
- (C) is above the shallowest consolidated layer; and
- (D) consists of one or more of the following soil textures:
 - (i) Clay, silty clay, or sandy clay;
 - (ii) silt; or
 - (iii) loam, clay loam, silty clay loam, sandy clay loam, silt loam, fine sandy loam, or sandy loam.
- (4) Based on historical data or site conditions, the groundwater elevation in the uppermost aquifer underlying the disposal site is at least 10 feet below the ground surface.
- (f) Irrigation. If the disposal site is irrigated, the chloride concentration of the irrigation water is less than 350 ppm.
- (g) Contamination. There is no chloride groundwater contamination below the disposal site, based on the chloride contamination map provided by the KCC. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1605. Land-spreading; sampling and analysis of drilling waste. Each operator that conducts land-spreading shall meet all of the following requirements:

- (a) Samples of the drilling waste shall be collected using a procedure that ensures that the samples are representative of the waste.
- (b) Samples shall be collected according to the following rates:
 - (1) For drilling waste stored in tanks, at least one sample from each tank;
 - (2) for earthen pits containing not more than 12,500 barrels of drilling waste, at least four samples, each from a different quadrant of the pit; and
 - (3) for earthen pits containing more than 12,500 barrels of drilling waste, at least one sample from each quadrant of the pit, plus at least one additional sample for every additional 1,000 barrels of drilling waste contained in the pit.
- (c) Samples of the drilling waste shall be analyzed for chloride concentration in parts per million by one of the following methods:
 - (1) Sending the samples to a laboratory that meets at least one of the following conditions:
 - (A) The laboratory is accredited for chloride analysis by the secretary; or
 - (B) the laboratory is a participant in the North American proficiency testing program for chloride analysis; or
 - (2) performing a field analysis of the samples. For calculating land-spreading rates, each chloride concentration determined using field analysis shall be multiplied by 1.2, as specified in the land-spreading worksheet.
- (d) If the drilling waste is analyzed in the field, all of the following requirements shall be met:
 - (1) One or more of the following methods shall be used to analyze the drilling fluid filtrate:
 - (A) Silver nitrate titration;
 - (B) mercuric nitrate titration;
 - (C) direct measurement using a chloride ion selective electrode;
 - (D) calculation of concentration based on electrical conductivity, using the equations $EC \times 0.64 = TDS$ and $TDS \times 0.61 = CC$, where EC means electrical conductivity in micromhos or microsiemens per centimeter, TDS means total dissolved solids, and CC means chloride concentration in parts per million; or
 - (E) an alternate field method proposed by the operator and approved in writing by the director of the KCC's conservation division.
 - (2) Each analysis shall be accompanied by the following information:
 - (A) The manufacturer's information sheet for the equipment that will be used;
 - (B) the calibration requirements for the equipment;
 - (C) the methods that will be used to prepare the sample for testing;
 - (D) the chloride concentration range of the method; and

(E) any limitations of the method.

- (3) The operator shall ensure that each person that analyzes drilling waste in the field is qualified to perform each analysis. The operator shall maintain documentation of the qualifications, including training and experience, of each person that analyzes drilling waste in the field.
- (4) All equipment that is used for analyzing drilling waste in the field shall be calibrated according to the manufacturer's instructions before the analyses are conducted. For each piece of equipment, a log documenting all calibrations shall be maintained. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1606. Land-spreading; determination of land-spreading rates. Before land-spreading may occur, each operator that plans to land-spread shall perform the following for each cell, as identified on the cell identification map, on which drilling waste will be land-spread:

- (a) Analyze the drilling waste to be land-spread at the disposal site to determine the chloride concentration, as specified in K.A.R. 28-29-1605; and
- (b) based on the chloride concentrations of the drilling waste and chloride concentrations of the soil in the cell, determine the maximum land-spreading rate according to the following requirements:
 - (1) The determination shall be based on the land-spreading worksheet; and
 - (2) the land-spreading rate shall ensure that, after land-spreading, both of the following requirements are met:
 - (A) Assuming uniform distribution of the chloride through the upper 12 inches of the soil, the total chloride concentration shall be 900 ppm or less; and
 - (B) the average thickness of the drilling waste across the site shall be no greater than two inches, and the drilling waste shall be distributed as uniformly as possible across the site. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1607. Land-spreading; operating and management requirements. Each operator that conducts land-spreading shall meet all of the following requirements:

- (a) Storage of drilling waste. The operator shall store the drilling waste at the site of generation in pits permitted by the KCC or in tanks until the drilling waste is transported to the disposal site. The operator may store drilling waste in sealed tanks at the disposal site for no more than 24 hours before the drilling waste is land-spread.
- (b) Time frame for land-spreading. The operator shall comply with the following:
 - (1) Complete the land-spreading within the approval period specified in K.A.R. 28-29-1601; and
 - (2) notify the appropriate KCC district office at least 48 hours before land-spreading.
- (c) Composition of drilling waste. The operator shall land-spread only if the composition of the drilling waste meets the following requirements:
 - (1) The chloride concentration of the drilling waste is less than 10,000 parts per million (ppm). The operator may blend drilling waste that has a chloride concentration greater than 10,000 ppm with drilling waste that has a chloride concentration of less than 10,000 ppm to create a combined drilling waste that has a chloride content of less than 10,000 ppm.
 - (2) The NORM level in the drilling waste, as identified through any subsequent sampling and analysis, remains consistent with the information submitted with the application. If the observed NORM level in the drilling waste is more than 370 Bq/kg (10 pCi/g), the operator shall immediately cease land-spreading and shall notify the KCC within two business days. The operator shall evaluate the condition of the land-spreading site to determine any potential site impact and perform all corrective measures required by the KCC or the department to protect human health or safety or the environment. The operator shall not conduct any additional land-spreading at the site unless authorized by the KCC.
- (d) Weather restrictions. The operator shall not conduct land-spreading if at least one of the following conditions exists at the disposal site:
 - (1) Precipitation is occurring or, according to national weather service predictions, has a greater than 50 percent probability of occurring within 24 hours after the land-spreading is completed.

- (2) The soil cannot readily absorb the moisture content of the drilling waste due to soil moisture content or frozen soil, or for any other reason.
- (e) Land-spreading requirements. The operator shall land-spread according to all of the following requirements:
- (1) The operator shall land-spread at a rate no greater than the land-spreading rate calculated using the land-spreading worksheet.
 - (2) The operator shall, as much as possible, land-spread so that the drilling waste has a uniform thickness over the disposal site.
 - (3) The operator shall limit the average thickness of the drilling waste to the calculated depth, unless the calculated depth is more than two inches. If the calculated depth is more than two inches, the operator shall limit the average thickness of the drilling waste to no more than two inches.
 - (4) The operator shall land-spread in a manner that prevents the drilling waste from either ponding on the disposal site or running off the disposal site or into buffer zones.
 - (5) The operator shall land-spread according to the methods described in the approved application. If any deviation from the approved methods occurs and the deviation could result in a chloride loading rate greater than the rate approved by the KCC, the operator shall report the deviation to the KCC by the end of the next business day.
- (f) Incorporation. The operator shall incorporate the drilling waste into the soil if the precipitation in the county in which the disposal site is located averages more than 25 inches per year. The following counties and any county located east of these counties shall be designated as meeting this condition: Jewell, Mitchell, Lincoln, Ellsworth, Rice, Reno, Kingman, and Harper.
- The operator shall incorporate the drilling waste into the soil using standard agricultural methods, including discing, plowing, knifing, and shallow injection. This procedure shall be performed as soon as possible and not later than 48 hours after land-spreading is completed. The operator shall incorporate the drilling waste into the soil according to the methods described in the approved application.
- (g) Land restoration. The operator shall take steps to restore the land-spreading area as described in the approved application. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

28-29-1608. Land-spreading; reporting and recordkeeping. Each operator that has conducted land-spreading shall meet all of the following requirements for each land-spreading site:

- (a) Within 60 days after the conclusion of land-spreading, submit a land-spreading report to the KCC. The operator shall identify each part of the report by the KCC land-spreading approval number from the approved application. The land-spreading report shall contain the following items:
- (1) The following information for each well from which the drilling waste was generated, on a form provided by the KCC:
 - (A) The operator name and license number;
 - (B) if the well is permitted in a state other than Kansas, the name and telephone number of the state authority that permitted the well;
 - (C) the location of the well, including the following:
 - (i) The state and county in which the well is located;
 - (ii) the legal description of the well;
 - (iii) the number of feet the well is located from the north or south section line and the east or west section line; and
 - (iv) the latitude and longitude of the well, as determined using GPS;
 - (D) the lease name;
 - (E) the well number;
 - (F) the American petroleum institute (API) number;
 - (G) the spud date, as defined in K.A.R. 82-3-101;
 - (H) verification that the drilling mud components are the same as those components identified on the approved application;
 - (I) verification that the chloride concentration of the drilling waste is less than 10,000 parts per million

- (ppm); and
- (J) the following information about the person performing the land-spreading, if different from the operator:
- (i) The name of the individual or company;
 - (ii) the contact person's name;
 - (iii) the contact person's telephone number or cellular phone number, or both; and
 - (iv) the contact person's electronic mail address, if there is one;
- (2) for the area that was actually used for land-spreading, an updated version of the cell identification map that was submitted with the application. The updated map shall include all information on the original cell identification map and the following information:
- (A) The date or dates on which land-spreading occurred;
 - (B) the land-spreading contractor name;
 - (C) identification of each well from which the drilling waste was generated;
 - (D) for each tank and each pit that was used to store drilling waste, the area where that drilling waste was land-spread, according to the following requirements:
 - (i) The dimensions of the area used for land-spreading shall be added to the map, if the area used for land-spreading is different from the cell boundaries, and shall be based on either physical references and measurements or GPS measurements, or both; and
 - (ii) the tank and pit numbers shall correspond to the labels used in the land-spreading worksheet; and
 - (E) notation identifying the cells that were not used for land-spreading;
- (3) a description of the procedures that were used to sample the drilling waste and the sampling rates;
- (4) a description of the methods that were used to analyze the drilling waste;
- (5) the results of each analysis of the drilling waste;
- (6) the completed land-spreading worksheet;
- (7) for each cell within the land-spreading site, the following information:
- (A) The volume of drilling waste that was spread on the cell; and
 - (B) a description of the land-spreading procedures that were used, including the following:
 - (i) Documentation of each variation from the processes or equipment described in the approved application;
 - (ii) a description of each deviation from the operating and management requirements of K.A.R. 28-29-1607; and
 - (iii) if the drilling waste was incorporated into the soil, a statement of the maximum time period from land-spreading to incorporation; and
- (8) if corrective measures were required by the KCC or the department at the land-spreading site, the following information:
- (i) A description of the conditions warranting the corrective measures;
 - (ii) a copy of the sampling and analysis plan, if this plan was required;
 - (iii) the results of all sampling and analyses that relate to the corrective measures;
 - (iv) a description of the corrective measures implemented at the land-spreading site; and
 - (v) a description of all long-term site monitoring or land-use restrictions associated with the site conditions;
- (b) within 12 months after the conclusion of land-spreading, submit to the KCC a report describing the timing and success of establishing vegetative cover or conditions suitable to support crops. If the establishment of vegetative cover or conditions suitable to support crops was unsuccessful, the operator shall submit a new plan describing how vegetative cover or conditions suitable to support crops will be established. The operator shall identify the report, plan, or both, by the KCC land-spreading approval number from the approved application; and
- (c) maintain the following documents, identified by the KCC land-spreading approval number from the approved application, for at least five years after the land-spreading occurs and make the documents available to the department and the KCC, upon request:
- (1) The results of all analyses;

- (2) a copy of each application and approval;
- (3) a copy of each land-spreading report and all required attachments; and
- (4) if any drilling waste was analyzed in the field, a copy of all calibration logs for each piece of equipment used and the qualifications of each person that performed the analyses. (Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

FINANCIAL REQUIREMENTS

28-29-2011. Waste tire permit fees. For each permit required in K.S.A. 65-3424b and amendments thereto, the applicant or permittee shall pay the applicable fee according to the following schedules.

(a) Permit application fees.

Mobile waste tire processor	\$250
Waste tire collection center	\$100
Waste tire processing facility.....	\$250
Waste tire transporter.....	\$100

(b) Annual permit renewal fees.

Mobile waste tire processor	\$100
Waste tire collection center	\$50
Waste tire processing facility	\$100
Waste tire transporter.....	\$50

(Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective Oct. 26, 2007.)

28-29-2101. Financial assurance for closure and postclosure. In K.A.R. 28-29-2101 through K.A.R. 28-29-2113, “facility” shall mean a solid waste disposal area, a solid waste processing facility, or both.

- (a) Evidence of financial assurance.** The owner or operator of each facility shall submit to the department evidence of financial assurance for the facility for the cost of closure, postclosure, or both, as specified in K.S.A. 65-3407, and amendments thereto. The financial assurance shall meet the following requirements:
- (1) Be continuous during the active life of the facility and the required postclosure care period;
 - (2) be in an amount that is equal to or greater than the accepted or revised amount as specified in subsection (e) of this regulation;
 - (3) be available when needed; and
 - (4) be legally enforceable.

(b) Financial assurance methods.

- (1) Allowable financial assurance methods shall consist of the following:
 - (A) A funded trust fund, as specified in K.A.R. 28-29-2103;
 - (B) a surety bond guaranteeing payment, as specified in K.A.R. 28-29-2104;
 - (C) a surety bond guaranteeing performance, as specified in K.A.R. 28-29-2105;
 - (D) an irrevocable letter of credit, as specified in K.A.R. 28-29-2106;
 - (E) an insurance policy, as specified in K.A.R. 28-29-2107;
 - (F) a corporate financial test, as specified in K.A.R. 28-29-2108;
 - (G) a corporate financial guarantee, as specified in K.A.R. 28-29-2109;
 - (H) a local government financial test, as specified in K.A.R. 28-29-2110;
 - (I) a local government guarantee, as specified in K.A.R. 28-29-2111;
 - (J) use of ad valorem taxing authority for a local government subdivision of the state that owns or operates a solid waste facility other than a municipal solid waste landfill, as specified in K.A.R. 28-29-2112; and
 - (K) the following simplified financial instruments, as specified in K.A.R. 28-29-2113:
 - (i) A simplified permit bond for facilities with a closure cost estimate of \$100,000 or less;
 - (ii) a simplified irrevocable letter of credit for facilities with a closure cost estimate of \$100,000 or less; and
 - (iii) an assigned certificate of deposit for facilities with a closure cost estimate of \$25,000 or less.

- (2) Any owner or operator may use a combination of instruments or methods as specified in these regulations, except that a method using a financial instrument guaranteeing performance shall not be used in combination with an instrument guaranteeing payment. Each method used in combination shall satisfy the requirements specified in these financial assurance regulations for its use.
 - (3) Any board of county commissioners that has established a dedicated fee fund pursuant to K.S.A. 65-3415f, and amendments thereto, may reduce the amount of financial assurance demonstrated by any other allowable method by the current balance accumulated in the dedicated fee fund at the time that the evidence of financial assurance is submitted.
 - (4) If the financial assurance is a purchased financial instrument, it shall be purchased from a financial, insurance, or surety institution meeting the quality and reliability standards suitable to institutions of that type and the standards specified in these financial assurance regulations.
- (c) Calculation of financial assurance.** The owner or operator of each facility shall meet the following requirements when calculating the amount of financial assurance for the current estimated cost to provide for closure, postclosure, or both.
- (1) The owner or operator shall meet the following requirements to determine the area or capacity to be included in the calculation of estimated cost.
 - (A) For each solid waste processing facility, the amount of closure financial assurance shall be calculated as the cost of removing and disposing of the greatest volume of waste allowed by terms and conditions of the permit, and all other costs relevant to certification of final closure, including certification.
 - (B) For each solid waste disposal area, the amount of closure financial assurance shall be calculated as the cost to complete final closure of the largest area to lack final cover at any one time before the next annual permit renewal. The calculated cost shall include the cost to complete all closure activities in a manner consistent with the approved facility closure plan.
 - (C) For each solid waste disposal area, the amount of postclosure financial assurance shall be calculated as the cost to be incurred for the largest area to have waste in place before the next annual permit renewal. The calculated cost shall include the cost to conduct the following, in a manner consistent with the approved facility postclosure plan, during the postclosure period of 30 years and any extensions of the postclosure period required by the secretary:
 - (i) Care and maintenance of the area, including all appurtenances; and
 - (ii) all required environmental monitoring.
 - (2) The owner or operator shall calculate the amount of financial assurance required by applying third-party costs to the activities listed in the closure plan and postclosure plan. The resulting amount shall not be discounted, nor shall any offset for the sale of recoverable materials be subtracted. Third-party costs shall be determined from one or more of the following sources:
 - (A) Representative costs supplied by the department;
 - (B) actual invoices paid by the owner or operator for the same or similar work;
 - (C) written bids from professional contractors having no other financial interest in the facility or its use;
 - or
 - (D) authoritative costing tables issued by publishers recognized for their research into the costs of the activities to be priced.
 - (3) If the calculated amount does not include a specific allowance to pay for contingent events, the owner or operator shall add an amount equal to 10% of the total cost for the purpose of determining the amount of financial assurance required.
 - (4) The owner or operator shall submit the cost estimates on worksheets provided by the department or on other forms that contain the same information.
- (d) When submissions are required.** The owner or operator of each facility shall submit evidence of financial assurance to the department at the following times:
- (1) Before the facility permit is issued by the secretary, including transferred permits;
 - (2) before a permit modification is issued by the secretary;
 - (3) annually during the active life of the facility, on or before the permit renewal date; and

(4) annually during the required period of postclosure, on or before the permit renewal date that was effective during the active life of the facility.

(e) Evaluation of amount of financial assurance.

(1) Upon receipt of the closure cost estimate, postclosure cost estimate, or both, from the owner or operator, the estimate or estimates shall be evaluated by the department to determine if the estimated amount of financial assurance is acceptable, according to the following criteria:

(A) The activities planned meet the requirements of the Kansas solid waste statutes and regulations, comply with all permit conditions, and are protective of public health and safety and the environment; and

(B) the method of estimating costs for the planned activities meets the requirements of this regulation.

(2) Revisions shall be made by the department in accordance with the evaluation, if the cost estimate factors are not acceptable.

(f) Annual updates to financial assurance. The owner or operator shall update the financial assurance amount, on or before the annual renewal date of each permit during the active life of the facility and annually during the required period of postclosure care, by recalculating the cost of closure, postclosure care, or both, using current dollars, or by the addition of an inflation factor to the amount accepted by the department for the prior year.

(1) If a change to any of the following has occurred that will change the cost of closure, postclosure, or both, the owner or operator shall recalculate the affected cost or costs, consistent with the change:

(A) The closure plan, as submitted or as approved;

(B) the postclosure plan, as submitted or as approved; or

(C) the conditions at the facility.

(2) If the inflation factor is used, the financial assurance instrument or other method of demonstrating financial assurance shall be adjusted to the updated amount according to the following formula:

$$\frac{IPD_y}{IPD_{y-1}} \times FA_{y-1} = FA$$

where:

IPD_y represents the current annual implicit price deflator for the gross domestic product;

IPD_{y-1} represents the previous year's implicit price deflator for the gross domestic product;

FA_{y-1} represents the previous year's approved estimate of closure or postclosure, or both; and

FA represents the current estimated cost of closure or postclosure, or both.

(g) Failure of the financial assurance method, or an inadequate amount of financial assurance. Each owner or operator of a facility who obtains information that a financial assurance instrument or other method has failed to meet the standards established by these financial assurance regulations for its use, or that the amount of financial assurance provided has become inadequate for reasons other than general annual price inflation, shall provide alternate or increased financial assurance of the type and within the time periods specified in these financial assurance regulations, but not later than 90 days after obtaining the information.

(h) Release from the requirement to provide financial assurance. Each owner or operator shall be released from the requirement to provide financial assurance for a facility for closure or postclosure care, or both, when the owner or operator is released by the department from further obligation to perform closure activities, postclosure activities, or both, at the facility.

(i) Exception for certain closed municipal solid waste landfills. The financial assurance requirements of subsection (a) of this regulation shall not apply to closed municipal solid waste landfills that are exempted from K.A.R. 28-29-101 through K.A.R. 28-29-120 according to the closure dates specified in K.A.R. 28-29-100.

(j) Exception to the requirement for postclosure financial assurance for facilities other than municipal solid waste landfills. Postclosure financial assurance shall not be required by the secretary for a facility that is not a municipal solid waste landfill unless the secretary determines that recurring environmental monitoring is required during the entire postclosure period.

(k) Exception to the closure plan pricing requirements for waste tire permittees. No waste tire processing facility, waste tire collection center, mobile waste tire processor, or waste tire transporter permittee shall be subject to the closure plan pricing requirements of subsections (c) and (f) of this regulation. The permittee shall determine the amount of financial assurance according to the following criteria:

- (1) Waste tire processing facilities and waste tire collection centers. The amount of financial assurance shall correspond to the closure cost estimate, as specified in K.A.R. 28-29-30.
- (2) Mobile waste tire processors. The amount of financial assurance shall be \$1,000.00.
- (3) Waste tire transporters. The amount of financial assurance shall correspond to the average number of passenger tire equivalents (PTEs) transported per month, according to the following schedule:

PTEs transported	Financial assurance
0 through 1,000	\$1,000.00
1,001 through 10,000	\$5,000.00
more than 10,000	\$10,000.00

(Authorized by K.S.A. 65-3406 and 65-3424h; implementing K.S.A. 2006 Supp. 65-3407 and K.S.A. 2006 Supp. 65-3424b; effective Feb. 24, 2000; amended Oct. 26, 2007.)

28-29-2102. Financial assurance for corrective action. Reference to the “facility” in these financial assurance regulations shall mean a solid waste disposal area or a solid waste processing facility, or both.

- (a) Requirement to provide financial assurance.** Each owner or operator of a facility who is required to undertake a corrective action program pursuant to the provisions of K.A.R. 28-29-114, or by order of any court of competent jurisdiction, shall provide evidence of financial responsibility for the cost of corrective action in the manner and form prescribed by these financial assurance regulations. Each owner or operator required to perform corrective action for a facility shall provide and maintain financial assurance that is continuous, adequate in amount, available when needed, and legally enforceable.
- (b) Financial assurance methods.** Allowable financial assurance methods shall be those specified in K.A.R. 28-29-2101(b).
- (c) Provider of the financial assurance.** The financial assurance for corrective action shall be supplied by one of the providers specified in K.A.R. 28-29-2101(c).
- (d) Demonstration of financial assurance, when required.** Each owner or operator required to undertake a program of corrective action shall provide a demonstration of financial assurance to the department at the following times:
 - (1) Within 120 days following whichever of the following dates is earliest:
 - (A) The date that the selected remedy was filed with the department by the owner or operator according to the provisions of K.A.R. 28-29-114(b); or
 - (B) the date that the secretary informed the facility of the amount of financial assurance required based on a probable remedial cost estimate; and
 - (2) annually during the corrective action period, on or before the anniversary of the date the first financial assurance demonstration was required.
- (e) Review of financial assurance demonstrations.** Financial assurance demonstrations shall be reviewed by the department and either approved or disapproved. A financial assurance method that has been disapproved by the department shall be replaced with an alternate method as specified in these financial assurance regulations to maintain continuous assurance during the corrective action period. A purchased financial instrument that has been disapproved because of wording or the quality of the issuing institution, or for any other reason, shall be replaced by an instrument acceptable to the department or by another method listed in K.A.R. 28-29-2101(b)(1), to maintain continuous assurance.
- (f) Calculation of required financial assurance.**
 - (1) The financial assurance requirement shall be based upon the total cost accumulated in a detailed estimate of the cost of the corrective action plan for implementing the remedy approved or specified by the department according to K.A.R. 28-29-114(b).

- (2) A probable remedial cost estimate for the financial assurance required to implement corrective measures at the facility may be developed by the secretary before a remedy is submitted by the facility and approved by the department.
- (3) If a trust fund is selected to provide the financial assurance, a separate estimate shall be made of the cost to be incurred during each year of the corrective action plan.
- (4) The corrective action plan shall be priced using one or more of the sources specified in K.A.R. 28-29-2101(f)(2).
- (5) The total amount of the corrective action plan shall not be discounted, nor shall any offset for the sale of recoverable materials be subtracted.
- (6) If the amount does not include a specific allowance to pay for contingent events, an amount equal to 10 percent of the total cost shall be added for the purpose of determining the amount of financial assurance required.
- (g) Evaluation of amount of financial assurance.** Upon receipt of a priced corrective action plan from the owner or operator, the plan shall be evaluated by the department to determine if the amounts calculated are sufficient for determining the amount of financial assurance required, or revisions shall be made by the department in accordance with the evaluation if the amounts are not sufficient. The adequacy of the physical actions planned and the pricing sources shall be considered in the departmental evaluation. Each owner or operator shall demonstrate financial assurance equal to the amount accepted or determined by the department.
- (h) Annual updates to financial assurance.** Each owner or operator shall update the financial assurance amount on or before the anniversary of the date the first financial assurance demonstration was required by this regulation. The financial assurance amount shall be updated by using of one or more of the methods specified in K.A.R. 28-29-2101(h).
- (i) Failure of the financial assurance method, or an inadequate amount of financial assurance.** Each owner or operator required to process a corrective action plan who obtains information that a financial assurance instrument or other method in use has failed to meet the standards established by these financial assurance regulations for its use, or that the amount of financial assurance provided has become inadequate for reasons other than general annual price inflation, shall provide alternate or increased financial assurance of the type and within the time periods specified in these financial assurance regulations, but in no event later than 90 days after obtaining the information.
- (j) Release from the requirement to provide financial assurance.** Each owner or operator required to provide financial assurance for corrective action shall be released from the requirement when the department or any court having jurisdiction releases the owner or operator from further obligation to perform corrective action activities at the facility.
- (k)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2103. Financial assurance provided by a funded trust fund.

- (a) Funded trust fund.** Any owner or operator of a solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by establishing a trust fund that conforms to the requirements of this regulation and by submitting a copy of the trust agreement, with an original signature, to the department.
 - (1) Each owner or operator of a new facility shall submit to the department a copy of the trust agreement, with an original signature, for closure or postclosure, or both, before the permit is issued by the department.
 - (2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit to the department a copy of the trust agreement, with an original signature, within the times specified in K.A.R. 28-29-2102(d).
 - (3) The trustee financial institution shall meet the following criteria:
 - (A) Be unrelated to the owner or operator;

(B) have the authority to act as trustee for the facility in the state of Kansas; and

(C) be a trust operation regulated and examined by a state or federal agency.

(b) Form of the trust agreement.

- (1) The wording of the trust agreement shall be identical to the wording in the document provided by the department.
- (2) The trust agreement shall establish a trust account, referred to in this regulation as “the fund,” for the receipt of annual payments into the fund and receipt of the earnings on the accumulated amount.
- (3) Each owner or operator shall update schedule A of the trust agreement within 60 days following a change in the amount of the current closure, postclosure, or corrective action cost estimate covered by the agreement.

(c) Payments into the fund for closure and postclosure. The owner or operator shall annually make payments into the fund for closure or postclosure, or both, over the estimated life of the facility as approved by the department. The approved facility life shall be referred to in this regulation as the “pay-in period.” The pay-in period shall be changed each time a new facility life is determined by the owner or operator and approved by the department. The pay-in period shall not exceed 30 years from the date a new facility is permitted or the date these financial assurance regulations become effective, whichever is later. Payments into the fund for closure or postclosure, or both, shall be calculated as follows:

- (1) The first payment into the fund for a new facility shall be made before the permit is issued by the department. The first payment shall be equal to the current, approved estimate of closure or postclosure costs, or both, divided by the number of years in the pay-in period.
- (2) The owner or operator shall make subsequent payments on or before the due date for each annual permit renewal. The amount of each subsequent payment shall be calculated by the following formula:

$$\frac{CE - CV}{Y} = P$$

where:

CE represents the current cost estimate for closure or postclosure, or both;

CV represents the current value of the fund. The current value of the fund shall be the current tax cost of the fund as reported in the trustee report unless market value is lower, in which case the lower value shall be used in the formula;

Y represents the number of years remaining in the pay-in period; and

P represents the amount of the required payment.

- (3) Any owner or operator may accelerate payments into the fund or may deposit the full amount of the current estimate for closure or postclosure costs, or both, at the time the fund is established. After making the accelerated or full payments, the owner or operator shall maintain the fund at least in the amount it would have been if initial and annual payments had been made according to the requirements in paragraphs (c)(1) and (c)(2) of this regulation.
- (4) If the owner or operator establishes a trust fund for closure, postclosure, or both, after having used another allowable method of providing financial assurance, the first payment into the fund shall be at least the amount that the fund would have contained if the trust fund had been used as the first method.
- (5) After the pay-in period is complete, whenever the current approved cost estimate for closure or postclosure, or both, is changed, the owner or operator shall compare the new estimate with the trustee’s most recent report of the current value of the fund and, if the fund is deficient, shall deposit the amount of deficiency on or before the date required by K.A.R. 28-29-2101(i).
- (6) After the pay-in period is complete, if the value of the fund exceeds the current approved estimate of closure or postclosure costs, or both, or if the owner or operator substitutes another approved method of providing financial assurance, the owner or operator may submit a request to the department for return of the excess amount. The request shall be evaluated by the department. The requested amount shall be approved, changed, or denied. The trustee shall make payment from the fund in the amount determined by the department’s evaluation.

(d) Reimbursement from the closure or postclosure fund. After beginning final closure, and annually during the postclosure period, the owner or operator or another authorized person may request reimbursement for

the costs incurred in carrying out the actions required by the approved closure or postclosure plan, or both. The reimbursement request shall include documentation for the costs to be reimbursed from the fund. The request shall be evaluated by the department. Reimbursement may be authorized by the department to the extent that, after the reimbursement is issued by the trustee, the fund still contains the amount required to complete closure or postclosure, or both. The trustee shall make payment from the fund in the amount determined by the department's evaluation.

(e) Payments into the fund for corrective action. Each owner or operator shall make payments into the fund for corrective action annually during the first half of the approved corrective action period. The first half of the corrective action period shall be the "pay-in period." The pay-in period shall be changed at any time that a new corrective action period is determined by the owner or operator and approved by the department. The pay-in period shall not exceed seven years beginning on the date these financial assurance regulations become effective, or 120 days after the date determined by K.A.R. 28-29-2102(d), whichever is later. Payments into the fund for corrective action shall be calculated as follows:

- (1) The first payment into the fund shall be at least in the amount of half of the approved estimate of the total cost of corrective action for the entire corrective action period, divided by the number of years in the pay-in period.
- (2) The amount of each subsequent payment shall be determined by the following formula:

$$\frac{RB - CV}{Y} = P$$

where:

RB represents the required balance, defined as the total amount of corrective action cost estimated to be incurred in the last half of the corrective action period;

CV represents the current value of the trust fund. The current value of the fund shall be the current tax cost of the fund as reported in the trustee report unless market value is lower, in which case market value shall be used in the formula;

Y represents the number of years remaining in the pay-in period; and

P represents the amount of the required payment.

- (3) Any owner or operator may accelerate payments into the fund or may deposit the full amount of the required balance at the time the fund is established. After making the accelerated or full payments, the owner or operator shall maintain the fund at least in the amount it would have been if initial and annual payments had been made according to the requirements in paragraphs (e)(1) and (e)(2) of this regulation.
 - (4) If the owner or operator establishes a corrective action trust fund after having used another allowable method of providing financial assurance, the first payment into the fund shall be at least the amount that the fund would have contained if the trust fund had been used as the first method.
 - (5) After the pay-in period is complete, whenever the current estimated cost of corrective action for the remaining corrective action period exceeds the amount of the current value of the fund, the owner or operator shall deposit the deficiency on or before the deadline specified in K.A.R. 28-29-2102 (i).
- (f) Reimbursement from the corrective action fund.** After the pay-in period is complete or after the required balance of the fund is reached, the owner or operator or another authorized person may request reimbursement for the costs incurred in carrying out the actions required by the corrective action plan. The reimbursement request shall include documentation of the costs to be reimbursed from the fund. The request shall be evaluated by the department. Reimbursement may be authorized by the department to the extent that, after the reimbursement is issued by the trustee, the fund still contains the amount required to complete the corrective action plan. The trustee shall make payment from the fund in the amount determined by the department's evaluation.
- (g) Termination of the trust agreement.** Any owner or operator may request termination of the trust agreement and return of any monies remaining in the fund if any of the following conditions is met:

- (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department from further obligation to provide financial assurance for closure, postclosure, corrective action, or any combination of these, at the permitted facility.
 - (3) The owner or operator completes corrective action required by order of any court of competent jurisdiction and is released from further obligation by the court at the permitted facility.
- (h) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2104. Financial assurance provided by a surety bond guaranteeing payment.

- (a) **Financial guarantee bond.** Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a financial guarantee bond that conforms to the requirements of this regulation and by submitting the original bond to the department.
- (1) Each owner or operator of a new facility shall submit to the department the bond for closure or postclosure, or both, before the permit is issued by the department.
 - (2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the bond to the department within the times specified in K.A.R. 28-29-2102(d).
 - (3) The surety institution shall meet the following criteria:
 - (A) Be unrelated to the owner or operator;
 - (B) have the authority to issue surety bonds in Kansas; and
 - (C) be listed as an acceptable surety institution on federal bonds.
- (b) **Form of the financial guarantee bond.** The wording of the financial guarantee bond shall be identical to the wording in the document provided by the department. If the penal sum of the bond is increased during the life of the bond, the owner or operator shall provide written acceptance of the new amount, indicated by a signed acceptance placed on the certificate of increase issued by the surety institution. The original signed and accepted certificate of increase shall be filed with the department.
- (c) **Standby trust fund.** Each owner or operator who uses a financial guarantee bond to satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, shall also establish a standby trust fund. A copy of the standby trust agreement with an original signature shall be submitted to the department along with the original financial guarantee bond. Under the terms of the bond, all payments from the penal sum shall be deposited by the surety institution directly into the standby trust fund, in accordance with instructions from the department. The standby trust fund shall conform to the requirements specified in K.A.R. 28-29-2103, except that, until the trust account is funded pursuant to the requirements of this regulation, the following shall not be required:
- (1) Payments into the fund as specified in K.A.R. 28-29-2103(c) or (e);
 - (2) updates to schedule A of the trust agreement as specified in K.A.R. 28-29-2103(b)(3);
 - (3) annual valuations as required by the trust agreement; and
 - (4) notices of nonpayment as required by the trust agreement.
- (d) **Provisions of the financial guarantee bond for closure and postclosure.** The financial guarantee bond for closure or postclosure, or both, shall require that the owner or operator perform one of the following:
- (1) Fund the standby trust fund in the amount of the penal sum of the bond before beginning final closure of the facility;
 - (2) fund the standby trust fund in the amount of the penal sum of the bond within 15 days after an administrative order issued by the department to begin closure becomes final, or within 15 days after an order to begin final closure is issued by any court of competent jurisdiction; or
 - (3) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the department of a notice of cancellation from the surety institution.

- (e) **Provisions of the financial guarantee bond for corrective action.** A financial guarantee bond for corrective action shall require that the owner or operator perform one of the following:
- (1) Fund the standby trust fund in the amount of the penal sum of the bond before beginning corrective action at the facility;
 - (2) fund the standby trust fund in the amount of the penal sum of the bond within 15 days after an administrative order issued by the department to begin corrective action becomes final, or within 15 days after an order to begin corrective action is issued by any court of competent jurisdiction; or
 - (3) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval for the assurance provided, within 90 days after receipt by both the owner or operator and the department of a notice of cancellation from the surety institution.
- (f) **Liability of the surety institution.** Under terms of the bond, the surety institution shall become liable on the bond obligation if the owner or operator fails to perform as guaranteed by the bond.
- (g) **Penal sum of the bond.** The penal sum of the bond for closure, postclosure, or both, shall be at least the amount of the current cost estimate for closure, postclosure, or both. The penal sum of the bond for corrective action shall be at least the amount of the current cost estimate for corrective action for the entire corrective action period.
- (h) **Increase in the penal sum of the bond.** Whenever the current cost of closure, postclosure, corrective action, or any combination of these, increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to the new amount and submit evidence of the increase to the department, or obtain other financial assurance as specified in these financial assurance regulations to cover the increase. Whenever the current cost of closure, postclosure, or corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the penal sum of the bond. The request shall be evaluated by the department, and the amount shall be decreased consistent with the department's evaluation.
- (i) **Cancellation of the bond by the surety institution.** Under terms of the bond, the surety institution may cancel the bond by sending notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days following the date by which the notice of cancellation has been received by both the owner or operator and the department, as evidenced by the return receipts.
- (j) **Cancellation of the bond by the owner or operator.** The owner or operator may request cancellation of the bond from the department if any of the following occurs:
- (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department from further obligation for closure or postclosure, or both, at the facility.
 - (3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.
- (k) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407; effective February 24, 2000.)

28-29-2105. Financial assurance provided by a surety bond guaranteeing performance.

- (a) **Performance guarantee bond.** Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a performance guarantee bond that conforms to the requirements of this regulation and by submitting the original bond to the department.
- (1) Each owner or operator of a new facility shall submit to the department the bond for closure or postclosure, or both, before the permit is issued by the department.
 - (2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the bond to the department within the times specified in K.A.R. 28-29-2102(d).
 - (3) The surety institution shall meet the following criteria:
 - (A) Be unrelated to the owner or operator;

(B) have the authority to issue surety bonds in Kansas; and

(C) be listed as an acceptable surety institution on federal bonds.

- (b) Form of the performance guarantee bond.** The wording of the performance guarantee bond shall be identical to the wording in the document provided by the department. If the penal sum of the bond is increased during the life of the bond, the owner or operator shall provide written acceptance of the new amount, indicated by a signed acceptance placed on the certificate of increase issued by the surety institution. The original signed and accepted certificate of increase shall be filed with the department.
- (c) Standby trust fund.** Any owner or operator who uses a performance guarantee bond to satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, shall also establish a standby trust fund. A copy of the standby trust agreement with an original signature shall be submitted to the department along with the original performance guarantee bond. Under the terms of the bond, all payments from the penal sum shall be deposited by the surety institution directly into the standby trust fund, in accordance with instructions from the department. The standby trust fund shall conform to the requirements specified in K.A.R. 28-29-2103, except that, until the trust account is funded pursuant to the requirement of this regulation, the following shall not be required:
- (1) Payments into the fund as specified in K.A.R. 28-29-2103 (c) or (e);
 - (2) updates to schedule A of the trust agreement as specified in K.A.R. 28-29-2103 (b)(3);
 - (3) annual valuations as required by the trust agreement; and
 - (4) notices of nonpayment as required by the trust agreement.
- (d) Provisions of the performance guarantee bond for closure and postclosure.** The performance guarantee bond for closure or postclosure, or both, shall require that the owner or operator perform either of the following:
- (1) Perform final closure or postclosure, or both, in accordance with the closure or postclosure plan, or both, and any other requirements of the permit and the department or a court of competent jurisdiction whenever required to do so; or
 - (2) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the department have received a notice of cancellation from the surety institution.
- (e) Provisions of the performance guarantee bond for corrective action.** A performance guarantee bond for corrective action shall require that the owner or operator perform either of the following:
- (1) Perform corrective action according to the corrective action plan or according to an order from the department or any court of competent jurisdiction whenever required to do so; or
 - (2) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval for the assurance provided, within 90 days after the date by which both the owner or operator and the department have received a notice of cancellation from the surety institution.
- (f) Liability of the surety institution.** Under terms of the bond, the surety institution shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- (g) Penal sum of the bond.** The penal sum of the bond for closure, postclosure, or both, shall be at least the amount of the current cost estimate for closure or postclosure, or both. The penal sum of the bond for corrective action shall be at least the amount of the current cost estimate for corrective action for the entire corrective period.
- (h) Increase in the penal sum of the bond.** Whenever the current cost of closure, postclosure, corrective action, or any combination of these, increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to the new amount and submit evidence of the increase to the department, or obtain other financial assurance as specified in K.A.R. 28-29-2101(b) to cover the increase. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the penal sum of the bond. The request shall be evaluated by the department, and the amount shall be decreased consistent with the department's evaluation.
- (i) Cancellation of the bond by the surety institution.** Under terms of the bond, the surety institution may cancel the bond by sending notice of cancellation by certified mail to both the owner or operator and the

department. Cancellation shall not occur, however, during the 120 days following the date by which the notice of cancellation has been received by both the owner or operator and the department, as evidenced by the return receipts.

- (j) Cancellation of the bond by the owner or operator.** The owner or operator may request cancellation of the bond from the department if any of the following occurs:
- (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department from further obligation for closure or postclosure, or both, at the facility.
 - (3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.
- (k)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2106. Financial assurance provided by an irrevocable letter of credit.

- (a) Letter of credit.** Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a letter of credit that conforms to the requirements of this regulation and by submitting the original letter of credit to the department.
- (1) Each owner or operator of a new facility shall submit to the department the letter of credit before the permit is issued by the department.
 - (2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the letter of credit to the department within the times specified in K.A.R. 28-29-2102(d).
 - (3) The institution issuing the letter of credit shall meet the following criteria:
 - (A) Be unrelated to the owner or operator;
 - (B) be authorized to issue letters of credit in Kansas; and
 - (C) conduct letter of credit activities that are regulated by an agency of the state or federal government.
- (b) Form of the letter of credit.** The wording of the letter of credit shall be identical to the wording in the document provided by the department. If the amount of the letter of credit is changed or the expiration date is extended, an original amendment to the letter of credit shall be filed with the department.
- (c) Standby trust fund.** Any owner or operator who uses a letter of credit to satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, shall also establish a standby trust fund. A copy of the standby trust agreement with an original signature shall be submitted to the department along with the original letter of credit. Under the terms of the letter of credit, all payments from the penal sum shall be deposited by the issuing institution directly into the standby trust fund, in accordance with instructions from the department. The standby trust fund shall conform to the requirements specified in K.A.R. 28-29-2103, except that, until the trust account is funded pursuant to the requirements of this regulation, the following shall not be required:
- (1) Payments into the fund as specified in K.A.R. 28-29-2103 (c) or (e);
 - (2) updates to schedule A of the trust agreement as specified in K.A.R. 28-29-2103(b)(3);
 - (3) annual valuations as required by the trust agreement; and
 - (4) notices of nonpayment as required by the trust agreement.
- (d) Provisions of the letter of credit.** The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall require that the expiration date be automatically extended for a period of at least one year on the expiration date and on each succeeding expiration date, unless 120 days before the current expiration date the issuing institution notifies both the owner or operator and the department by certified mail of a decision not to extend the expiration date. Under terms of the letter of credit, the 120-day period shall begin on the date by which both the owner or operator and the department have received the notice, as evidenced by the return receipts.

- (e) **Amount of the letter of credit.** The letter of credit for closure, postclosure, or both, shall be issued for at least the amount of the current cost of closure or postclosure, or both, whichever is greater. The letter of credit for corrective action shall be issued for at least the amount of the current cost estimate for corrective action during the entire corrective action period.
- (f) **Increases in the amount of the letter of credit.** Whenever the current cost of closure, postclosure, corrective action, or any combination of these, increases to an amount greater than the amount of the letter of credit, the owner or operator, within 60 days after the increase, shall either cause the amount of the letter of credit to be increased to the new amount and submit evidence of the increase to the department, or obtain other financial assurance as specified in K.A.R. 28-29-2101(b) to cover the increase. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the amount of the letter of credit. The request shall be evaluated by the department, and the amount shall be decreased consistent with the department's evaluation.
- (g) **Failure to perform closure, postclosure, and corrective action.** The amount of the letter of credit, in whole or in part, shall be drawn by the department following a determination by the department of either of the following:
- (1) That the owner or operator has failed to perform closure, postclosure, or corrective action, or any combination of these, in accordance with the closure, postclosure, or corrective action plan, or any combination of these, when required; or
 - (2) that the owner or operator has failed to perform according to the terms and conditions of the permit.
- (h) **Failure to supply alternate financial assurance.** If the owner or operator does not establish alternate financial assurance as specified by this regulation and does not obtain written approval for its use from the department within 90 days after the date by which both the owner or operator and the department have received a notice from the issuing institution that it has decided not to renew the letter of credit beyond the current expiration date, the amount of the letter of credit may be drawn by the department.
- (i) **Termination of the letter of credit by the owner or operator.** The owner or operator may request termination of the letter of credit if any of the following occurs:
- (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department from further obligation for closure or postclosure, or both, at the facility.
 - (3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.
- (j) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2107. Financial assurance provided by insurance.

- (a) **Insurance policy.** Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining an insurance policy that conforms to the requirements of this regulation and by submitting to the department a copy of the insurance policy with an original signature, including all riders and endorsements, and an insurance certificate.
- (1) The owner or operator of a new facility shall submit the insurance policy, riders, endorsements, and certificate to the department before the permit is issued by the department.
 - (2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the insurance policy, riders, endorsements, and certificate to the department within the times specified in K.A.R. 28-29-2102 (d).
 - (3) The insuring institution shall meet the following criteria:
 - (A) Be unrelated to the owner or operator;
 - (B) be licensed to transact the business of insurance by an agency of a state; and
 - (C) be listed as a surplus or excess lines carrier in Kansas.

- (b) Form of the insurance certificate.** The wording of the insurance certificate shall be identical to the wording in the document provided by the department.
- (c) Amount of insurance.** The insurance policy shall be issued for a face amount at least equal to the current cost estimate for closure or postclosure, or both, or at least in the amount of the current cost estimate for corrective action for the entire corrective action period, exclusive of legal defense costs. The term “face amount” shall mean the total amount the insurer is obligated to pay under the policy. Actual payments under the policy by the insurer shall not change the face amount, although the future liability of the insurer shall be lowered by the amount of the payments.
- (d) Provisions of the insurance policy.** An insurance policy issued for closure, postclosure, corrective action, or a combination of these, shall guarantee that funds are available to pay for the actions required by the closure plan, postclosure plan, corrective action plan, or any combination of these, whenever required. The policy shall also guarantee that once final closure, postclosure, corrective action, or any combination of these, begins, the insurer will be obligated to disburse funds up to the face amount of the policy, at the direction of the department. The insurer shall not exercise discretion to determine whether the expenses incurred for closure, postclosure, corrective action, or any combination of these, are ordinary, necessary, or prudent, if disbursement is required by the department.
- (e) Reimbursement of expenditures.** After closure, postclosure, or corrective action, or any combination of these, has begun, an owner or operator or any other authorized person may request reimbursement of expenditures by submitting itemized statements with documentation to the department. The itemized statements shall be evaluated by the department. The expenditures listed shall be approved or disapproved by the department. After evaluating the itemized statements, payment from the insurer for approved expenditures may be authorized by the department if the remaining face amount of the insurance policy is sufficient to cover any remaining costs of closure, postclosure, corrective action, or any combination of these. If the department believes that future costs of closure, postclosure, corrective action, or any combination of these, will exceed the remaining face amount of the policy, authorization for payment may be withheld by the department.
- (f) Requirement to maintain the insurance policy in force.** The owner or operator shall maintain the insurance policy for closure, postclosure, corrective action, or any combination of these, in force until the department consents, in writing, to its termination. Failure to pay the premium when due, without substitution of alternate financial assurance as specified by K.A.R. 28-29-2101(b), shall constitute a violation of these regulations. The owner or operator shall be in violation if the department receives notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than on the date the policy is actually terminated.
- (g) Assignment of the insurance to successive owners or operators.** Each policy of insurance shall contain a provision allowing assignment of the policy to a successor owner or operator. This assignment may be conditional upon consent of the insurer, which shall not be unreasonably withheld.
- (h) Cancellation of the insurance by the insurer.** The policy of insurance for closure, postclosure, corrective action, or any combination of these, shall stipulate that the insurer not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to both the owner or operator and the department. The cancellation, termination, or failure to renew shall not occur during the 120 days beginning with the date by which both the owner or operator and the department have received notice, as evidenced by the return receipts. Cancellation, termination, or failure to renew shall not occur, and the policy shall remain in full force and effect if, on or before the date of expiration, one or more of the following events occur:
- (1) The department determines the facility has been abandoned.
 - (2) The facility permit is terminated or revoked by the department, or a new permit is denied.
 - (3) The commencement of closure, postclosure, or corrective action, or any combination of these, activities is required by the department or any court of competent jurisdiction.

- (4) The owner or operator is named as a debtor in a voluntary or involuntary proceeding under any state or federal bankruptcy law.
- (5) The owner or operator fails to provide alternative financial assurance in a form and amount acceptable to the department.
- (6) The premium due is paid.
- (i) Increased cost estimates.** During the active life of the facility, whenever the current cost estimate of closure, postclosure, corrective action, or of any combination of these, increases to an amount greater than the face amount of the insurance policy, the owner or operator, within 60 days after the increase, shall either cause the face amount of the policy to be increased to an amount at least equal to the current cost estimate of closure, postclosure, corrective action, or any combination of these, and submit evidence of the increase to the department, or shall obtain other financial assurance as specified in K.A.R. 28-29-2101(b) to cover the increase. Whenever the estimated cost of closure, postclosure, corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the face amount of the policy. The request shall be evaluated by the department, and a decrease in the amount shall be allowed by the department, consistent with its evaluation.
- (j) Annual adjustments to the face amount of the policy.** Beginning on the date that liability to make payments pursuant to a policy for postclosure begins, the insurer shall annually increase the face amount of the policy. This increase shall be based on the face amount of the policy, less any payments made exclusive of legal defense costs, multiplied by an amount equivalent to 85 percent of the most recent investment rate or 85 percent of the equivalent coupon-issue yield rate announced by the U.S. department of the treasury for 26-week treasury securities.
- (k) Termination of the insurance by the owner or operator.** The owner or operator may request cancellation of the insurance policy from the department if either of the following occurs:
 - (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department or any court of competent jurisdiction from further obligation for closure, postclosure, corrective action, or any combination of these, at the facility.
- (l)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2108. Financial assurance provided by the corporate financial test.

- (a) Corporate financial test.** Any corporate owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by passing a financial test based on the current financial condition of the permitted corporation as specified in this regulation. Related corporations may not be summed or otherwise combined for the purpose of the financial test, but majority-owned subsidiary corporations of the permitted corporation may be consolidated.
- (b) The financial component.**
 - (1) The owner or operator shall satisfy one of the following three conditions:
 - (A) A current rating for its senior unsubordinated debt of AAA, AA, A, or BBB, as issued by Standard & Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;
 - (B) a ratio of less than 1.5, obtained by dividing total liabilities by net worth; or
 - (C) a ratio of greater than 0.10, obtained by dividing the sum of net income plus depreciation, depletion, and amortization, minus \$10 million, by total liabilities.
 - (2) The tangible net worth of the owner or operator shall be greater than either of the following:
 - (A) The sum of current closure, postclosure, and corrective action cost estimates and any other environmental obligations, including guarantees, covered by the financial test plus \$10 million; or
 - (B) \$10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities in the financial statements, if all of the current closure, postclosure, and corrective action costs and any other environmental obligations covered by the financial test are recognized as liabilities in the owner's or operator's audited annual financial statements.

- (3) The owner or operator shall have assets located in the United States amounting to at least the sum of current closure, postclosure, and corrective action cost estimates and any other environmental obligations or guarantees covered by the financial test as described in subsection (d) of this regulation.

(c) Record keeping and reporting requirements.

- (1) The owner or operator shall place a copy of the following items in the facility's operating record and file the originals with the department:
 - (A) A letter signed by the owner's or operator's chief financial officer that is identical to the form provided by the department and that meets the following criteria:
 - (i) Lists all the current cost estimates for closure, postclosure, and corrective action and any other environmental obligations or guarantees covered by any financial test under state or federal laws and regulations in any jurisdiction; and
 - (ii) provides evidence demonstrating that the permitted corporate entity meets the requirements of the financial component of subsection (b) of this regulation;
 - (B) a copy of the permitted corporate entity's most recent corporate annual financial statements containing a report of independent certified public accountants, including an unqualified opinion. An adverse opinion, disclaimer of opinion, or qualified opinion shall be cause for the department to disapprove use of the corporate financial test. A qualified opinion may be evaluated by the department. Use of the financial test may be approved or disapproved by the department based on its evaluation;
 - (C) a special report of independent certified public accountants based on applying agreed-upon procedures engaged in accordance with professional auditing standards and stating the following:
 - (i) The accountant has compared the data in the chief financial officer's letter that is specified as coming from the most recent year-end audited financial statements to the audited financial statements; and
 - (ii) in connection with this procedure, the accountant found the data to be in agreement; and
 - (D) if the chief financial officer's letter provides a demonstration that the permitted corporate entity has assured environmental obligations in the manner provided in paragraph (b)(2)(B) of this regulation, a special report of independent certified public accountants that meets the following criteria:
 - (i) Provides verification that all of the environmental obligations covered by the financial test have been recognized as liabilities in the most recent annual financial statements;
 - (ii) describes the methods used to measure and report on these obligations; and
 - (iii) provides verification that the tangible net worth of the permitted corporate entity is at least \$10 million plus the amount of any guarantees provided.
- (2) After the initial placement of the items listed in paragraph (c)(1) of this regulation in the facility operating record and the initial filing of the originals with the department, the owner or operator shall annually update the information in the operating record and file the updated originals with the department. The updated information shall be placed in the operating record and filed with the department within 90 days following the close of the owner's or operator's most recently completed fiscal year.
- (3) The owner or operator shall no longer be required to submit the items specified in paragraph (c)(1) of this regulation or otherwise comply with the requirements of this regulation if any of the following occurs:
 - (A) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (B) The owner or operator is released by the department from further obligation for closure, or postclosure, or both, at the facility.
 - (C) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.
- (4) If the owner or operator determines that the permitted corporate entity no longer meets the requirements of subsection (b) of this regulation, the owner or operator shall, within 120 days following the owner's or operator's most recent fiscal year end, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain approval from the department for its use.

- (5) Based on the department's reasonable belief that the owner or operator may no longer meet the requirements of subsection (b) of this regulation, the owner or operator may be required by the department at any time to provide reports of its financial condition, including or in addition to current financial test documentation as specified in subsection (c) of this regulation, for evaluation. If the department evaluation results in a determination that the owner or operator no longer meets the requirements to use the financial test, the owner or operator shall provide alternate financial assurance as specified in K.A.R. 28-29-2101(b).
- (d) Calculation of costs to be assured.** Each owner or operator using the corporate financial test to provide financial assurance for closure, postclosure, and corrective action shall combine the current cost estimates for the permitted facility with all other environmental obligations or guarantees also assured by any financial test in any local, state, federal, or foreign jurisdiction. The combined environmental cost shall then be used in the financial test calculations provided to the department by the owner or operator. The environmental obligations of consolidated subsidiary corporations that are assured by the financial test shall also be included in the combined environmental obligations covered by the test.
- (e)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2109. Financial assurance provided by the corporate guarantee.

- (a) Corporate guarantee.** Any owner or operator of a permitted solid waste disposal area or processing facility may meet the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a written guarantee for closure, postclosure, or corrective action costs, or any combination of these as specified in this regulation.
- (1) The guarantor shall comply with the following:**
- (A)** The requirements for owners or operators using the corporate financial test as specified in K.A.R. 28-29-2108(b);
 - (B)** the record keeping and reporting requirements in K.A.R. 28-29-2108(c); and
 - (C)** the terms of the guarantee.
- (2) The guarantor shall be one of the following:**
- (A)** The direct or higher-tier parent corporation of the owner or operator; or
 - (B)** a corporation having the same parent corporation as the owner or operator.
- (b) Form of the corporate guarantee.** The guarantor shall provide a written guarantee that is worded identically to the document provided by the department.
- (c) Effective date of the guarantee.** A guarantee of closure, postclosure, or both, for a new permit shall be in force before the permit is issued by the department. A guarantee for corrective action shall be in force within the times specified in K.A.R. 28-29-2102 (d).
- (d) Record keeping and reporting requirements.** Copies of the guarantee, with original signatures, shall be placed in the facility operating record of the owner or operator and filed with the department, accompanied by the documents specified for use by the owner or operator in K.A.R. 28-29-2108(c), that shall be completed using the financial information and reports of the guarantor corporation. These documents shall be updated and filed annually.
- (e) Consideration for the guarantee.** If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter from the guarantor's chief financial officer shall describe the value received in consideration for the guarantee.
- (f) Provisions of the guarantee.** The terms of the written guarantee shall specify the following remedies:
- (1)** If the owner or operator fails to perform closure, postclosure, corrective action, or any combination of these, for the permitted facility covered by the guarantee when required by the department or any court of competent jurisdiction, the guarantor shall perform either of the following remedies:
 - (A)** Perform or pay a third party to perform closure, postclosure, corrective action, or any combination of these, as required by the department or any court of competent jurisdiction; or

- (B) establish a fully funded trust fund as specified in K.A.R. 28-29-2103, in the name of the owner or operator, in the amount of the current cost estimate for closure, postclosure, corrective action, or any combination of these, whichever is greatest.
- (2) The guarantee shall remain in effect unless the guarantor sends prior notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days beginning on the date by which both the owner or operator and the department have received the notice of cancellation, as evidenced by the return receipts.
- (3) If the guarantee is canceled, the owner or operator shall, within 90 days following the date by which both the owner or operator and the department have received the cancellation notice, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain the approval of the department for its use. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor shall provide the alternate financial assurance in the name of the owner or operator within 120 days following the date by which both the department and the owner or operator have received the cancellation notice.
- (g) Failure of the guarantee.** If the corporate guarantor no longer meets the requirements of K.A.R. 28-29-2108(b), the owner or operator shall, within 90 days, obtain alternate financial assurance and obtain the approval of the department for its use. If the owner or operator fails to provide alternate financial assurance as specified in K.A.R. 28-29-2101(b) within the 90-day period, the guarantor shall, within the next 30 days, provide the alternate financial assurance in the name of the owner or operator.
- (h) Release of the guarantee.** The owner or operator shall be no longer required to meet the requirements of this regulation if any of the following occurs:
 - (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department from further obligation for closure, postclosure, or both, at the permitted facility.
 - (3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.
- (i)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2110. Financial assurance provided by the local government financial test.

- (a) Local government financial test.** Each owner or operator of a permitted solid waste disposal area or processing facility that is a local government subdivision of the state of Kansas may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, for the closure, postclosure, or corrective action costs, or any combination of these, for a municipal solid waste landfill by use of a local government financial test as specified in this regulation.
- (b) Definitions.** The following terms used in this regulation shall be defined as specified below:
 - (1) “Annual debt service” means the principal and interest due on outstanding long-term debt during a stated time period, typically the current fiscal year, and payments on capital lease obligations during the same period.
 - (2) “Cash plus marketable securities” means all the cash and marketable securities held by the local government on the last day of a fiscal year but shall exclude the following:
 - (i) Cash and marketable securities designated to satisfy past obligations; and
 - (ii) cash and investments held in fiduciary funds.
 - (3) “Current year” means the most recently completed fiscal year.
 - (4) “Deficit” means total annual revenues minus total annual expenditures.
 - (5) “Long-term debt issued in the current year” means the amount of principal borrowing actually received during the current year from the issue of obligations due more than one year from the date of issue but shall exclude the following:
 - (i) The amount of capital lease liability incurred during the year; and

- (ii) the proceeds of any long-term borrowing in the current year that remains in the capital projects fund at year's end.
 - (6) "Nonroutine capital expenditures" means capital expenditures of the capital projects fund and expenditures identified as capital outlays or asset additions in the audited annual financial statements of other governmental funds and enterprise funds.
 - (7) "Total annual expenditures" means the total of all expenditures but shall exclude the following:
 - (i) Debt principal repayments;
 - (ii) nonroutine capital expenditures; and
 - (iii) the expenditures of fiduciary or other trust funds managed by a local government on behalf of specific third parties.
 - (8) "Total annual revenues" means revenues from all taxes, fees, investment earnings, and intergovernmental transfers but shall exclude the following:
 - (i) The proceeds from borrowing and asset sales; and
 - (ii) revenues of fiduciary or other trust funds managed by a local government on behalf of specific third parties.
- (c) The financial component.**

- (1) If the owner or operator has outstanding general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, the bonds shall have a current bond rating of AAA, AA, A, or BBB, as issued by Standard & Poor's, or a current rating of Aaa, Aa, A, or Baa, as issued by Moody's.
- (2) If the owner or operator does not have outstanding and rated general obligation bonds, the owner or operator shall meet each of the following financial ratios based on the owner's or operator's most recent audited annual financial statements:
 - (A) A ratio of cash plus marketable securities divided by total annual expenditures equal to or greater than 0.05, referred to as the "liquidity ratio";
 - (B) a ratio of annual debt service divided by total annual expenditures equal to or less than 0.20, referred to as the "debt service ratio"; and
 - (C) a ratio of long-term debt issued in the current year divided by nonroutine capital expenditures of the current year equal to or less than 2.00, referred to as the "use of funds ratio."
- (3) The owner or operator's annual financial statements shall be audited by an independent certified public accountant. The financial statements shall be prepared in conformity with one of the following accounting methods:
 - (A) Generally accepted accounting principles for governments; or
 - (B) a prescribed basis of accounting that demonstrates compliance with the cash basis and budget laws of the state of Kansas.
- (4) An owner or operator who prepares the annual financial statements in conformity with generally accepted accounting principles for governments and uses the financial ratio test method of financial assurance may omit the ratio test stated in paragraph (c)(2)(C) of this regulation.
- (5) A local government owner or operator shall not be eligible to use the financial test to assure closure, postclosure, corrective action, or any combination of these, for a municipal solid waste landfill if any of the following conditions exists:
 - (A) The owner or operator is currently in default on any outstanding general obligation bonds.
 - (B) The owner or operator has any general obligation bonds outstanding that are rated lower than BBB, as issued by Standard & Poor's, or Baa, as issued by Moody's.
 - (C) The owner or operator operated at a deficit equal to or greater than five percent of the total annual revenue in each of the two most recently completed fiscal years.
 - (D) The owner or operator receives an adverse opinion, disclaimer of opinion, or qualification of opinion in the report of independent certified public accountants accompanying the audited financial statements for the most recently completed fiscal year. A qualified opinion may be evaluated by the department. Use of the financial test may be approved or disapproved by the department based on its evaluation.

(d) Public notice component. The local government owner or operator shall place a reference to the cost of closure, postclosure, corrective action, or any combination of these, that is assured by the local government financial test in its comprehensive annual financial report or other audited annual financial report during each year in which the owner or operator is required to provide financial assurance by these financial assurance regulations. Disclosure shall be made in a note attached to the audited annual financial statements and shall include the following:

- (1) The nature and source of the requirements to conduct closure, postclosure, corrective action, or any combination of these;
- (2) the liability reported or calculated at the balance sheet date;
- (3) the estimated total cost of closure, postclosure, corrective action, or any combination of these, remaining to be recognized following the reported balance sheet date;
- (4) the percentage of landfill capacity on the reported balance sheet date;
- (5) the estimated remaining landfill life in years, or the estimated period of corrective action remaining; and
- (6) the method projected for use or the method currently in use to fund the actual costs of closure, postclosure, corrective action, or any combination of these, when required.

(e) Record keeping and reporting requirements.

- (1) The owner or operator shall place a copy of the following items in the facility's operating record and shall file the originals with the department:
 - (A) A letter signed by the local government's chief financial officer that is identical to the form provided by the department and that includes the following:
 - (i) A list of all the current cost estimates covered by a financial test, including the municipal solid waste landfill and any other environmental obligations or guarantees assured by financial test in any jurisdiction;
 - (ii) a certification that the local government meets the conditions of subsection (c) of this regulation required for use of either the bond rating or the financial ratio method of the local government financial test;
 - (iii) a certification that the local government has satisfied the public notice component requirements of subsection (d) of this regulation; and
 - (iv) a certification that the local government has not exceeded the amount eligible to be assured by the financial test according to subsection (f) of this regulation;
 - (B) a copy of the local government's audited comprehensive annual financial report or other audited annual financial report for the latest completed fiscal year, including the report and opinion of the auditor, who shall be an independent certified public accountant; and
 - (C) a special report of independent certified public accountants that is based on applying agreed-upon procedures engaged in accordance with professional auditing standards and that identifies the procedures performed and states that the independent accountant has determined all of the following:
 - (i) The data used to calculate the financial test ratios in paragraphs (c)(2)(A), (c)(2)(B), and (c)(2)(C) of this regulation were derived from the audited annual financial statements for the most recently completed fiscal year, and the ratios calculated from this data equal or exceed the stated requirements.
 - (ii) The owner or operator satisfies the requirements of paragraphs (c)(5)(C) and (f)(1) of this regulation.
 - (iii) The annual financial report has been prepared on a basis of accounting required by paragraph (c)(3) of this regulation and is accompanied by an auditor's opinion satisfying the requirements of paragraph (c)(5)(D) of this regulation.
- (2) The items required by paragraph (e)(1) of this regulation shall be placed in the facility operating record to fulfill the requirements of K.A.R. 28-29-108(q)(1)(G) and shall be filed with the department no later than the effective date for a new permit, and also annually before the end of the latest allowable day for filing the annual audited financial report with the Kansas department of administration, director of accounts and reports, without extension, according to the provisions of K.S.A. 75-1124, and amendments thereto.

- (3) The local government owner or operator shall satisfy the requirements of the local government financial test at the close of each fiscal year. If the local government no longer meets the requirements of the financial test, it shall obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) within 90 days of discovering the failure or within 210 days following the close of the most recently completed fiscal year, whichever first occurs, and shall obtain approval from the department for its use.
- (4) The local government owner or operator shall no longer be required to submit the items specified in paragraph (e)(1) of this regulation or otherwise comply with the requirements of this regulation if either of the following conditions occurs:
 - (A) The local government substitutes an alternate method or instrument of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains the department's approval for its use.
 - (B) The local government is released by the department from further obligation for closure, postclosure, corrective action, or any combination of these, at the permitted facility.
- (5) Additional reports of financial condition may be required by the department from the local government at any time for evaluation. If the department evaluation results in a determination that the local government no longer meets the requirements of the local government financial test, the local government shall provide alternate financial assurance as specified in K.A.R. 28-29-2101(b) within 90 days following notice to the local government from the department.

(f) Calculation of costs to be assured.

- (1) The portion of closure, postclosure, and corrective action costs that an owner or operator may assure by the local government financial test shall be determined as follows:
 - (A) If the local government owner or operator does not assure other environmental obligations or guarantees by the financial test, it may assure closure, postclosure, and corrective action costs for the permitted facility up to an amount equaling 43 percent of total annual revenues.
 - (B) If the local government owner or operator assures other environmental obligations or guarantees in any jurisdiction by the financial test in addition to the closure, postclosure, and corrective action costs of the permitted facility, it shall add the current cost estimates of the additional obligations or guarantees to the closure, postclosure, and corrective action costs of the permitted facility, and the combined environmental obligations assured shall not exceed 43 percent of total annual revenues.
 - (2) The local government owner or operator shall provide alternate financial assurance as specified in K.A.R. 28-29-2101(b) for any environmental obligations or guarantees in excess of 43 percent of total annual revenues.
- (g)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2111. Financial assurance provided by a local government guarantee.

- (a) Local government guarantee.** Each owner or operator of a municipal solid waste landfill may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a written guarantee for closure, postclosure, or corrective action costs, or any combination of these, that is provided by a local government subdivision of the state of Kansas as specified in this regulation. The guarantor shall comply with the following:
- (1) The requirements of the financial component for use of the local government financial test as specified in K.A.R. 28-29-2110(b);
 - (2) the public notice requirements of K.A.R. 28-29-2110(c);
 - (3) the record keeping and reporting requirements of K.A.R. 28-29-2110(d); and
 - (4) the terms of the guarantee.
- (b) Form of the local government guarantee.** The guarantor shall provide a written guarantee that is worded identically to the document provided by the department.
- (c) Effective date of the guarantee.** A guarantee of closure or postclosure, or both, for a new permit shall be in force before the permit is issued by the department. A guarantee for corrective action shall be in force within the times specified in K.A.R. 28-29-2102 (d).

- (d) Record keeping and reporting requirements.** Copies of the guarantee, with original signatures, shall be placed in the facility operating record of the owner or operator and filed with the department, with the documents specified for use by the owner or operator in K.A.R. 28-29-2110(d). The documentation shall be completed using the financial information and reports of the guarantor. These documents shall be updated and filed annually.
- (e) Provisions of the guarantee.** The terms of the guarantee shall stipulate the following:
- (1) If the owner or operator fails to perform closure, postclosure, corrective action, or any combination of these, for the permitted facility covered by the guarantee when required to do so by the department or a court of competent jurisdiction, the guarantor shall perform either of the following:
 - (A) Perform or pay a third-party to perform closure, postclosure, corrective action, or any combination of these, as required by the department or any court of competent jurisdiction; or
 - (B) establish a fully funded trust fund as specified in K.A.R. 28-29-2103, in the name of the owner or operator, in the amount of the current cost estimate for closure, postclosure, corrective action, or any combination of these, whichever is greatest.
 - (2) The guarantee shall remain in effect unless the guarantor sends notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days beginning on the date by which both the owner or operator and the department have received the notice of cancellation, as evidenced by the return receipts.
 - (3) If the guarantee is canceled, the owner or operator shall, within 90 days following the date by which both the owner or operator and the department have received the cancellation notice, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain approval from the department. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor shall provide the alternate financial assurance in the name of the owner or operator within the next 30 days.
- (f) Failure of the guarantee.** If the local government guarantor no longer meets the requirements of K.A.R. 28-29-2110(b), the owner or operator shall, within 90 days, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain approval from the department for its use. If the owner or operator fails to provide the alternate financial assurance within the 90-day period, the guarantor shall, within the next 30 days, provide the alternate financial assurance in the name of the owner or operator.
- (g) Release of the guarantee.** The owner or operator shall no longer be required to meet the requirements of this regulation if any of the following occurs:
- (1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.
 - (2) The owner or operator is released by the department from further obligation for closure, postclosure, or both, at the permitted facility.
 - (3) The owner or operator completes the required corrective action and is released from further obligation by the department or any court of competent jurisdiction.
- (h)** The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2112. Financial assurance provided by use of ad valorem taxing authority.

- (a) Ad valorem taxing authority.** Any owner or operator that is a local government subdivision of the state of Kansas and that is permitted to own or operate a solid waste disposal area or processing facility other than a municipal solid waste landfill may use its statutory authority to assess and collect ad valorem taxes to assure the closure, postclosure, or corrective action costs, or any combination of these, of the facility as required by K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both.
- (b) Proof of ad valorem taxing authority.** Whenever required to do so by the department, the local government owner or operator shall perform one of the following:
- (1) Provide evidence of currently unused ad valorem taxing authority within any statutory tax limit or cap;

- (2) provide analyses demonstrating that the cost of closure, postclosure, corrective action, or any combination of these, will be provided by ad valorem tax assessments within any statutory limit or cap in future budgets at the time that closure, postclosure, corrective action, or any combination of these, is required; or
 - (3) provide evidence demonstrating the existence and amount of a governmental or enterprise fund containing monies designated for use in providing closure, postclosure, corrective action, or any combination of these, for the permitted facility.
- (c) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2113. Financial assurance provided by a simplified financial instrument.

(a) Simplified financial instrument.

- (1) Any owner or operator of a permitted solid waste disposal area or processing facility with a current closure cost estimate equal to or less than \$100,000, and with financial assurance from a single provider for that facility, may provide financial assurance in a simplified form of surety bond or letter of credit, instead of by use of any other financial instrument specified in K.A.R. 28-29-2101(b). The owner or operator of the facility may, with the department's approval, use an assigned certificate of deposit or assigned escrow account to provide financial assurance if the facility closure cost estimate is \$25,000 or less.
- (2) The simplified forms of financial instruments specified in this regulation shall not be used to provide financial assurance for the estimated cost of postclosure or corrective action.

(b) Form of the simplified financial instrument. The wording of the simplified surety bond or letter of credit shall be identical to the wording in the documents provided by the department.

(c) When a simplified financial instrument shall not be used. Whenever the estimate of closure cost exceeds \$100,000 for any facility for which one of the simplified financial instruments specified in subsection (a) is in use, or whenever requested by the department, the owner or operator shall substitute, for that facility, one or more alternative methods of financial assurance as specified in K.A.R. 28-29-2101(b).

(d) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-340, as amended by L. 1999, Ch. 112, Sec. 1; effective February 24, 2000.)

28-29-2201. Insurance for solid waste disposal areas and processing facilities. Except as provided in subsection (d), each owner or operator of a permitted solid waste disposal area or processing facility shall secure and maintain liability insurance for claims arising from injuries to other parties, including bodily injury and property damage.

(a) Amount of liability coverage.

- (1) The permit application shall be reviewed by the department to determine the amount of insurance coverage that the owner or operator shall secure and maintain for each disposal area or processing facility, based on the types of waste disposed and on the location, area, and geological characteristics of the site.
- (2) Each owner or operator shall maintain insurance that shall provide coverage, including completed operations coverage, in the amount determined by the department but with commercial general liability limits not less than \$1,000,000 for each occurrence and \$1,000,000 for the annual aggregate.
- (3) Each owner or operator shall maintain a policy that shall provide that the deductible amount be first paid by the insurer upon establishment of the legal liability of the insured, with full right of recovery from the insured. The deductible amount shall not exceed 2.5% of the policy limit for single occurrences.

(b) Insurance provider.

- (1) Each owner or operator shall maintain a liability insurance policy that shall be issued by an insurance company authorized to do business in Kansas or through a licensed insurance agent operating under the authority of K.S.A. 40-246b, and amendments thereto.

- (2) Each owner's or operator's liability insurance policy shall be subject to the insurer's policy provisions filed with and approved by the commissioner of insurance pursuant to K.S.A. 40-216 and amendments thereto, except as authorized by K.S.A. 40-246b, and amendments thereto.

(c) Proof of insurance.

- (1) Each owner or operator shall furnish, at the following times, a certificate or memorandum of insurance to the department for the department's approval, showing specifically the coverage and limits together with the name of the insurance company and insurance agent:
 - (A) Before the department issues the permit and before any development work is started; and
 - (B) before each annual renewal of the permit during the active life of the area or facility.
- (2) If any of the coverage set forth on the certificate or memorandum of insurance is reduced, canceled, terminated, or not renewed, the owner or operator or insurance company shall furnish the department with an appropriate notice of the action no fewer than 30 days before the effective date of the reduction, cancellation, termination, or nonrenewal.

(d) Governmental entities. Any owner or operator that is a governmental entity as defined in K.S.A. 75-6102, and amendments thereto, and is subject to provisions of the Kansas tort claims act, and amendments thereto, may provide to the department a statement or other evidence of its intention to fund liability judgements in the manner provided in K.S.A. 75-6113, and amendments thereto, in lieu of providing evidence of purchased insurance covering liability for accidental occurrences.

(e) Variances. Any owner or operator may request that the department evaluate the hazard or hazards involved and may request a variance, under K.A.R. 28-29-2, from the insurance method or specific insurance coverage amounts prescribed in this regulation if all the following conditions are met:

- (1) The solid waste management activity is conducted solely on the premises where the wastes are generated.
- (2) The owner or operator performs the waste management activity.
- (3) The owner or operator is the owner of the property where the activity is conducted.
- (4) The owner or operator is able to demonstrate other financial responsibility satisfactory to the department. This demonstration shall be made by adding the required liability coverage amount to the costs of closure and postclosure care assured by the corporate financial test method as specified in K.A.R. 28-29-2108, or the corporate guarantee method as specified in K.A.R. 28-29-2109. (Authorized by K.S.A. 2001 Supp. 65-3406; implementing K.S.A. 2001 Supp. 65-3407; effective March 22, 2002.)