

Sec. 22a-209-7. Solid waste disposal areas

Solid waste disposal areas shall comply with the following permit and operating requirements.

(a) Any person wishing to operate a solid waste disposal area must comply with the permit requirements of Section 22a-209-4 of these regulations.

(b) The information which the Commissioner requires in an application may vary according to the category of the disposal area. Such categories may include:

(1) existing solid waste disposal areas where future disposal will take place only in areas where solid waste has previously been disposed of and is still present,

(2) existing solid waste disposal areas where future disposal will take place in areas where no solid waste had previously been disposed of, or, if solid waste had previously been disposed of, it has been removed, and

(3) new solid waste disposal areas.

(c) **Protection of ground and surface waters.**

(1) Minimum separation from ground waters. A minimum of sixty (60) inches shall be maintained between the base of deposited solid wastes and the maximum high water table or bedrock unless the permittee can establish to the satisfaction of the Commissioner that some lesser separation will be adequate to insure that solid wastes do not contact ground water. This provision shall not apply to solid waste disposal areas subject to solid waste permits granted prior to the effective date of these regulations which expressly authorize a minimum separation from ground water or bedrock of less than sixty (60) inches, provided that the permittee establishes to the satisfaction of the Commissioner that the continuation of solid waste disposal in accordance with such existing permit will not result in contact of solid waste with ground water.

(2) Water quality.

(A) In addition to the requirement of 22a-209-7 (c) (1) above, and except as provided in 22a-209-7 (c) (2) (B) below, a new or existing solid waste disposal area shall not impair the quality of surface or ground water beyond the solid waste boundary to a degree that would degrade the quality of such waters beyond the water quality classification established by the Department in accordance with Section 22a-426 of the Connecticut General Statutes, The Connecticut Water Quality Standards and Criteria, as amended, or the standards for quality of public drinking water established by the State Department of Health Services and contained in Section 19-13-B102 of the Regulations of Connecticut State Agencies, as amended. In those cases where the existing water quality fails to meet the established standards, the disposal area shall not further degrade the water quality.

(B) Notwithstanding 22a-209-7 (c) (2) (A) above, the Commissioner may designate an alternate boundary, beyond the solid waste boundary, beyond which the site may not impair the quality of surface or ground waters in accordance with the standards noted in 22a-209-7 (c) (2) (A). The designation of an alternate boundary must not result in the degradation of the quality of water which may be needed or used for human consumption, and must be based on an analysis to include but not be limited to the following factors:

(i) the hydrogeological characteristics of the facility and the surrounding land,

(ii) the volume and physical and chemical characteristics of the leachate,

(iii) the quantity, quality and directions of flow of ground water,

(iv) the proximity and withdrawal rates of ground water users in the vicinity of the solid waste disposal area,

(v) the availability of alternate drinking water supplies,

(vi) the existing quality of ground water including other sources of contamination and their cumulative impacts on ground water,

(vii) public health, safety, and welfare effects, and

(viii) the zone of impact for the leachate plume.

(3) Grading. The solid waste disposal area shall be graded, and provided with drainage facilities if necessary, to minimize infiltration of rainfall or surface runoff onto the area, to prevent erosion or washing out of the area, and to prevent the collection of standing water on the area. The top surface area shall at all times be graded to a slope of at least four (4) percent unless otherwise authorized by the Commissioner, and the side slopes shall not exceed a grade of one (1) on three (3), one vertical on three horizontal, unless otherwise authorized by the Commissioner.

(4) Floodplains. Solid waste facilities in floodplains shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste, so as to pose a hazard to persons or property, wildlife, or land or water resources.

(5) Surface water. Solid waste shall not be deposited so as to come in contact with surface waters, and disposal operations shall be conducted so as to minimize impact on surface waters. The Commissioner shall determine the required separation distance between deposited solid wastes and surface water for each solid waste disposal area based on site conditions.

(6) Erosion control. Siltation or retention basins or other methods approved by the Commissioner for retarding runoff shall be used where necessary to avoid stream siltation or flooding problems due to excess runoff.

(7) Wells. A minimum distance of one thousand (1000) feet shall be maintained between deposited solid wastes and wells used for water supply purposes unless the owner or operator can establish to the satisfaction of the Commissioner that some lesser separation will be adequate to insure against pollution of the waters withdrawn from said wells.

(8) Monitoring.

(A) No new solid waste disposal area shall begin operations without the owner or operator first installing a ground water monitoring system constructed and located as specified in the approved facility plan. Further, no new disposal area shall begin operations prior to the owner or operator obtaining a sufficient number of surface and ground water samples, and analyses thereof, to establish baseline water quality information. Monitoring shall be performed in accordance with the schedule in the facility plan and/or permit to construct.

(B) Upon written notice to the owner or operator of an active solid waste disposal area or the owner of an inactive or closed solid waste disposal area that in the opinion of the Commissioner the area poses an actual or potential threat to the quality of the ground or surface waters of the state, the owner or operator shall investigate the extent and degree of surface and/or ground water contamination resulting from the disposal of solid wastes; submit construction and installation plans for a surface and/or ground water monitoring

system to the Commissioner for approval; and, upon approval, install such monitoring system in conformance with such approved plans. The approved plans shall become part of the facility plan. Monitoring shall be performed in accordance with a schedule approved by the Commissioner.

(C) Ground or surface water samples shall be analyzed by a state-approved laboratory using methods approved by the Commissioner. Copies of analyses shall be forwarded to the Solid Waste Management Unit of the Department.

(d) Access.

(1) All-weather roads which provide access between public roads or highways and the solid waste disposal area are required and shall be maintained so as to be passable by all vehicles which utilize the area.

(2) Access to the solid waste disposal area shall be controlled to prevent unauthorized use. Control may be accomplished through use of appropriate fences, gates and signs.

(3) A sign shall be posted at the entrance to the facility which states, at a minimum, the name of the permittee and hours of use of the area, the authorized users, and required safety precautions.

(e) Fire protection.

(1) The owner or operator of an active solid waste disposal area, and the owner of an inactive or closed disposal area shall be responsible for firefighting activities. The owner or operator of a disposal area wherein smoldering, smoking or burning is occurring shall:

(A) immediately notify the Solid Waste Management Unit of the Department,

(B) if reasonably necessary, obtain firefighting assistance from the fire department(s) having jurisdiction in the area,

(C) insure that firefighting activities continue until all smoldering, smoking and burning has ceased, as proven by scientific methods acceptable to the Department, and

(D) close the facility until all smoldering, smoking and burning has ceased, if required by the Commissioner or local firefighting officials.

(2) The owner or operator of any solid waste disposal area shall not conduct disposal activities within the immediate vicinity of any smoldering, smoking, or burning. Precautions shall be taken to prevent disposal activities from interfering with firefighting activities.

(3) Any disruption of the grade or covered compacted surfaces shall be repaired and recovered upon completion of firefighting activities.

(f) Measuring procedures.

(1) Daily records for regional solid waste disposal areas shall be maintained in a manner acceptable to the Commissioner. Such records shall state measured weights or estimated tonnage of wastes received from each municipality using the site, total weights from other sources, and the tonnage of materials removed for resource recovery and the markets used. Such records shall be available for inspection by representatives of the Department at any reasonable time. Monthly summaries of these records shall be submitted to the Department no later than ten (10) days after the last day of each quarter of the calendar year.

(2) Updated topographic mapping of fill areas performed in compliance with the specifications in 22a-209-4 (b) (2) (A) (ii) and (iii) shall be submitted to the Commissioner annually, for regional solid waste disposal areas. The Commissioner may require the submittal of such information for other disposal areas as he or she deems necessary.

(g) **Certified operators.** An operator certified by the Commissioner in accordance with Section 22a-209-6 of these regulations shall be present at a solid waste disposal area at all times during operating hours.

(h) **Working face.**

(1) The width of the working face shall be kept as narrow as is consistent with the proper operation of trucks and equipment in order that the area of waste material exposed during the operating day is minimal. No working face shall exceed one hundred fifty (150) feet in width when measured across the operating surface of the solid waste disposal area. Except where separate areas are designated on the approved facility plan for specific wastes, no more than one working face shall be in use at any one time.

(2) Unloading of solid wastes shall be restricted and controlled to assure the proper handling of solid wastes. Scavenging at the working face shall be prohibited.

(3) The cell construction method of sanitary landfilling shall be used. Solid waste shall be spread and compacted in layers not to exceed three feet thick in order to conserve capacity of the solid waste disposal area and minimize moisture infiltration, settlement and public health problems. Each individual cell shall not exceed ten (10) feet in height unless the owner or operator of such solid waste disposal area can establish to the satisfaction of the Commissioner that individual cells with a height greater than ten (10) feet may be utilized without interfering with the safe and sanitary operation of the disposal area. Cover material shall be placed on each cell according to Section 22a-209-7 (l).

(i) **Waste collection areas.**

(1) Owners or operators of solid waste disposal areas may provide one or more containers within a designated collection area so that waste may be unloaded from non-commercial vehicles and deposited therein. Disposal area personnel shall oversee the disposal of waste at such designated collection areas.

(2) Scavenging at waste collection areas shall be prohibited.

(3) Collection areas shall be located a safe distance from the working face and from the movement of disposal area equipment and commercial collection and hauling vehicles.

(4) The owner or operator shall be responsible for the sanitary condition and orderly appearance of the waste collection area, and shall remove all waste from the collection area and deposit it in the working face of the disposal area at such frequencies as to insure that no waste remains in the collection area for longer than forty-eight (48) hours.

(5) Portions of the solid waste disposal area which are used solely to collect and store recyclable materials are not subject to the requirements of subdivision (i) (4) of this section.

(j) **Equipment.**

(1) The equipment used for spreading, compacting and covering shall be of sufficient size and number to achieve maximum compaction and efficient operation.

(2) Provision shall be made for the routine operational maintenance of equipment at the solid waste disposal area or elsewhere, and for the prompt repair or replacement of equipment.

(3) The owner or operator of a solid waste disposal area shall establish a contingency plan outlining procedures for obtaining alternative equipment or other alternative method of disposal in the event of an equipment breakdown which can reasonably be expected to exceed twenty-four hours in duration. The owner or operator shall notify the Department

immediately when such a breakdown occurs.

(k) **Blowing litter.** Blowing litter shall be controlled by use of fencing near the working area or by the use of earth banks or other natural barriers acceptable to the Commissioner. Solid wastes shall be unloaded in such a manner as to minimize scattering. The entire solid waste disposal area shall be reasonably clear of litter at the end of each working day.

(l) **Cover operations.**

(1) Cover material. There shall be stored within the boundaries of the solid waste disposal area a standby supply of cover material equal to twenty-five (25) percent of the volume of the disposal area consumed in ten days at normal disposal rates. Such cover stockpile shall be protected from freezing in the winter season.

(2) Daily cover. Cover material shall be applied and compacted to a minimum thickness of six (6) inches on all exposed wastes by the end of each working day.

(3) Intermediate cover. On all but the final lift of a solid waste disposal area, if more than nine months is expected to elapse before another lift is added, a layer of intermediate cover material, compacted to a minimum uniform depth of one (1) foot, shall be placed on such area and vegetative cover shall be planted in the next planting season and shall be maintained thereon.

(4) Final cover. A uniform layer of final cover material compacted to a minimum depth of two (2) feet shall be placed over the entire surface of each portion of the final lift not later than one week following the final placement of solid waste in that portion of the area unless otherwise specified in the facility permit to construct. Upon application of final cover, the area shall be regraded to prevent erosion and ponding, and vegetative cover shall be planted in the next planting season and shall be maintained thereon.

(m) **Vector control.**

(1) Conditions shall be maintained that are unfavorable for the harboring, feeding and breeding of vectors.

(2) Additional means for controlling and exterminating vectors shall be instituted, whenever necessary in the judgment of the Commissioner to prevent the transmission of disease.

(n) **Decomposition gases.**

(1) Decomposition gases generated within the solid waste disposal area shall be controlled as necessary to avoid posing a hazard to any persons or property and to minimize adverse environmental effects.

(2) The concentration of methane gases generated by the solid waste disposal area shall not exceed:

(A) Twenty-five percent (25%) of the lower explosive limit for methane in on-site or off-site structures including buildings, sheds and utility or drainage lines, but excluding gas control or recovery system components, or

(B) The lower explosive limit for methane in the ground at the property boundary of the solid waste disposal area.

(3)

(A) No new solid waste disposal area shall begin operations without the owner or operator first installing any gas venting and monitoring system indicated on the approved facility plan. A phase-in of the system may be permitted if so indicated in the facility's

permit to construct.

(B) Upon written notice to the owner or operator of an active solid waste disposal area or the owner of an inactive or closed solid waste disposal area that in the opinion of the Commissioner the area poses an actual or potential hazard from decomposition gases, the owner or operator shall submit construction and installation plans for a gas monitoring and/or venting system to the Commissioner for approval, and, upon approval, shall install such a system in conformance with such approved plans. The approved plans shall become part of the facility plan. Monitoring shall be performed in accordance with a schedule approved by the Commissioner.

(4) The recovery of methane gases for use as a fuel is not prohibited by this subsection.

(o) **Restrictions on certain wastes.**

(1) Hazardous wastes shall be excluded from solid waste disposal areas. However, separate facilities at a solid waste disposal area may be approved for the disposal of certain hazardous wastes by the Commissioner in accordance with Public Act 84-115 and the Hazardous Waste Management regulations of the Department of Environmental Protection. Special wastes, including any liquid waste, shall be excluded unless disposal is approved in writing by the Commissioner.

(p) **Recycling.** Materials to be recycled shall be maintained in a separate area so as not to interfere with disposal operations. Materials held for recycling shall be adequately screened from view or removed at frequent intervals.

(q) **Employee facilities.** Each solid waste disposal area shall have adequate shelter and restroom facilities for employees, first aid supplies, and telephone or two-way (i.e., sending and receiving) radio communication equipment. Each of these must be provided at or adjacent to the disposal area.

(r) **Air quality.**

(1) Dust and odors resulting from the operation of the solid waste disposal area shall be controlled at all times to assure compliance with the applicable regulations of the Department for the Abatement of Air Pollution.

(2) No open burning of solid waste shall be conducted except upon compliance with the applicable statutes and regulations of the Department for the Abatement of Air Pollution regarding open burning.

(s) **Bird hazards to aircraft.** A solid waste disposal area disposing of putrescible wastes that may attract birds and which occurs within 10,000 feet (3,048 meters) of any public airport runway used by turbojet aircraft or within 5,000 feet (1,524 meters) of any public airport runway used by only piston-type aircraft shall conduct its operations so as not to pose a bird hazard to aircraft. Affirmative measures for bird hazard control shall be taken as necessary.

(t) **Screening.** Best practical effort shall be made to screen the working face of a solid waste disposal area from view from surrounding residential or business areas.

(u) **Disruption of solid waste disposal areas.**

(1) Written approval shall be obtained from the Commissioner prior to any excavation, disruption, or removal of deposited material at an active, inactive or closed solid waste disposal area.

(2) All requests for approval shall include but need not be limited to an operational plan

stating the area involved, depth of proposed excavation with final grades, estimated cubic yards of material to be excavated or disrupted, site where excavated material is to be redeposited and estimated time required for completion of excavation procedures. The approved plan shall become part of the facility plan.

(3) All excavation shall be confined to an area consistent with the number of pieces of digging equipment and/or trucks used for haulage.

(4) Adequate measures shall be taken during excavation to protect the public health and to control dust, odors, fires, vectors, and blowing litter.

(5) Disposal of all solid waste resulting from excavation shall be in conformity with the requirements of these regulations.

(v) **Endangered species.**

(1) Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife. As used in this subsection, “endangered or threatened species” means any species listed as such pursuant to Section 4 of the Endangered Species Act.

(2) The facility or practice shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 CFR Part 17. As used in this subsection, “destruction or adverse modification” means a direct or indirect alteration of critical habitat which appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat, and “Taking” means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting or attempting to engage in such conduct.

(w) **Fill limit markers.** The permitted lateral fill limits of a new solid or special waste disposal area or unused portions of an active solid or special waste disposal area shall be staked with markers approved by the Commissioner which shall be located such that the neighboring markers may be easily seen from each marker. Solid waste shall not be deposited beyond the line between neighboring markers.

(x)

(1) New municipal solid waste disposal areas. After the effective date of this subsection, no permit shall be issued under Section 22a-208a of the General Statutes for construction and operation of a new municipal solid waste disposal area unless:

(A) The groundwater at such solid waste disposal area and its zone of influence is classified GC by the Water Quality Standards.

(B) An application under Section 22a-208a of the General Statutes has been filed with the Commissioner to construct and operate such solid waste disposal area and such application includes the information and materials specified in subsection (f) of Section 22a-209-14 of the Regulations of Connecticut State Agencies; and

(C) Such solid waste disposal area will be constructed and operated in compliance with the requirements of subsections (g), (h), (i), (j), and (k) of Section 22a-209-14 of the Regulations of Connecticut State Agencies.

(2) An application to construct and operate a new municipal solid waste disposal area may propose alternate technologies to meet the goals of subsections (g) (1) through (g) (4), (h), (i), (j), and, (k) of Section 22a-209-14 of the Regulations of Connecticut State Agencies, which goals are to protect the waters of the State from pollution and to prevent the dispersion

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of waste. The applicant shall demonstrate that such alternate technologies will achieve these goals to the same degree as the requirements of the said subsections, that such alternate technologies have been utilized in similar circumstances, and that such alternate technologies are supported by scientific and engineering evidence that they will provide an equivalent degree of protection against water pollution and dispersion of waste as implementation of the requirements specified in the said subsections.

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