

*** DRAFT - NOT YET FILED ***

TO BE RESCINDED

3745-40-04 **Land application agronomic management.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-40-01 of the Administrative Code.]

- (A) For exceptional quality sewage sludge sold or given away in a bag or other container, or distributed in bulk, for land application, a label shall be affixed to such bag or other container or an information sheet shall be provided to the person who receives such sewage sludge. The label or information sheet shall contain at least the following information:
- (1) The name, address, telephone number, and NPDES permit number of the permittee;
 - (2) A statement that the material is or contains a by-product of wastewater treatment;
 - (3) A statement that the Ohio EPA, division of surface water, may be contacted at 1-877-644-2001;
 - (4) The concentration of total Kjeldahl nitrogen, ammonia nitrogen, total phosphorus, and total potassium of the sewage sludge in milligrams per kilogram (dry weight basis);
 - (5) The concentration of total Kjeldahl nitrogen, available phosphorus, and soluble potassium of the sewage sludge as a "grade"; and
 - (6) When applicable for a liming material, the effective neutralizing power, fineness index, and standard of fineness of the sewage sludge.
- (B) Except as provided below, exceptional quality sewage sludge shall be exempt from paragraphs (D) to (R) of this rule.
- (C) The director may apply any or all of the requirements in paragraphs (D) to (R) of this rule to exceptional quality sewage sludge on a case-by-case basis after determining that the requirements are needed to protect public health and the environment.

- (D) Bulk sewage sludge shall be land applied at a rate that is equal to or less than the agronomic rate except as provided for in rule 3745-40-07 of the Administrative Code.
- (E) A permittee who generates bulk sewage sludge shall provide a label or information sheet to the following persons: all persons who receive bulk sewage sludge from the permittee; all persons who land apply bulk sewage sludge received from the permittee; and the owner or lease holder of the land upon which the bulk sewage sludge is land applied. Such label or information sheet shall provide all notices and information necessary to comply with the requirements of this chapter including the following:
- (1) The name, address, telephone number, and NPDES permit number of the permittee;
 - (2) A statement that the material is or contains a by-product of wastewater treatment;
 - (3) A statement that the Ohio EPA, division of surface water, may be contacted at 1-877-644-2001;
 - (4) The concentration of total Kjeldahl nitrogen, ammonia nitrogen, total phosphorus, and total potassium of the sewage sludge in milligrams per kilogram (dry weight basis);
 - (5) The concentration of total Kjeldahl nitrogen, available phosphorus, and soluble potassium of the sewage sludge as a "grade"; and
 - (6) When applicable for a liming material, the effective neutralizing power, fineness index, and standard of fineness of the sewage sludge.
- (F) For soils with soil phosphorus test results greater than one hundred fifty parts per million (three hundred pounds per acre) Bray-Kurtz P1 extraction or one hundred seventy parts per million (three hundred forty pounds per acre) Mehlich 3 extraction, land application of bulk sewage sludge shall either:
- (1) Cease until such time that soil phosphorus test results are less than or equal to one hundred fifty parts per million (three hundred pounds per acre) Bray-Kurtz P1 extraction or one hundred seventy parts per million (three hundred forty pounds per acre) Mehlich 3 extraction; or

- (2) Continue when it has been demonstrated to the division, using a phosphorus index, that a low relative risk of phosphorus movement to waters of the state exists at the authorized site.
- (G) Land application of liquid bulk sewage sludge shall be at the agronomic rate for the reasonably expected yield or the available water capacity of the soil, whichever is less at the time of land application.
- (H) The permittee shall post signs at sites where class B bulk sewage sludge is land applied. The signs shall read "NOTICE: CLASS B SEWAGE SLUDGE HAS BEEN APPLIED TO THIS SITE." Such signs shall include the name of the permittee and the permittee's telephone number. Such sign(s) shall be posted within twenty-five feet of an obvious access point(s) and shall be unobstructed from view. Any authorized site with road frontage shall have at least one sign facing the road, within twenty-five feet of the road when possible, and shall be unobstructed from view. The text shall be in black capital letters on a white background and the letters shall be one inch in height. At sites with a low potential for public exposure, such signs shall be in place from the time land application begins to a minimum of thirty days after the termination of land application activity at the site. At sites with a high potential for public exposure such signs shall be in place from the time land application begins to a minimum of one year after the termination of land application activity at the site.
- (I) No person shall land apply bulk sewage sludge if such application is likely to adversely affect a threatened or endangered species listed under section 4 of the "Endangered Species Act, or its designated critical habitat.
- (J) No person shall land apply bulk sewage sludge to food crop, feed crop, fiber crop, or cover crop land over fifteen per cent slope or to pasture or vegetation over twenty per cent slope unless one of the following activities is performed:
- (1) Same day incorporation or subsurface injection with operations done on the contour; or
 - (2) The field is established and managed in contour strips with alternate strips in cover crop, pasture, or vegetation.
- (K) No person shall land apply bulk sewage sludge to land that is frozen or snow-covered so that the bulk sewage sludge enters waters of the state except as provided in a permit issued pursuant to Chapter 6111. of the Revised Code. The following criteria shall be met for surface application of bulk sewage sludge on frozen or snow-covered ground:

- (1) An isolation distance of one hundred feet shall be maintained from waters of the state (excluding groundwater); and
- (2) The following ground cover shall be maintained.
- (a) Where slope is less than or equal to six per cent, the soil surface at the time of surface application shall have at least eighty per cent ground cover; or
- (b) Where slope is greater than six per cent, the soil surface at the time of surface application shall have at least ninety per cent ground cover or shall be established and managed in contour strips with at least eighty per cent ground cover on the strips receiving sewage sludge land.
- (L) No person shall land apply bulk sewage sludge to land that is flooded so that the bulk sewage sludge enters waters of the state except as provided in a permit issued under Chapter 6111. of the Revised Code. Surface application of bulk sewage sludge shall be limited to same day incorporation on areas of authorized sites that are frequently flooded during periods when flooding is expected.
- (M) No person shall land apply bulk sewage sludge in a grassed waterway.
- (N) No person shall land apply bulk sewage sludge within the isolation distances listed in table N-1 of this rule.

Table N-1

	Surface application	Injected
Waters of the state (excluding groundwater)	33 feet	
Occupied building	300 feet	100 feet
Medical care facility	1000 feet	300 feet
Private potable water source	300 feet	100 feet
Bedrock	3 feet	
Sinkhole or UIC class V drainage	300 feet without a grass buffer, 100 feet with a grass buffer	

- (O) No person shall land apply bulk sewage sludge within a ground water source water assessment and protection area or wellhead protection area that has been delineated or endorsed by the director for a community public water system. The isolation distance from a community public water system well, where no delineated or endorsed ground water source water assessment and protection area or wellhead protection area exists, shall be one thousand feet.
- (P) No person shall locate a bulk sewage sludge staging area, stockpile area, field storage of sewage sludge area, or regional storage of sewage sludge facility within the isolation distances listed in table P-1 of this rule.

Table P-1

Waters of the state (excluding groundwater)	100 feet
Occupied building	300 feet
Private potable water source	300 feet
Bedrock	3 feet
Sinkhole or UIC class V drainage well	300 feet
Medical care facility	1000 feet

- (Q) No person shall locate a staging area, stockpile area, field storage of sewage sludge area, or regional storage of sewage sludge facility within a ground water source water assessment and protection area or wellhead protection area that has been endorsed or delineated by the director for a community public water system. The isolation distance from a community public water system well, where no delineated or endorsed ground water source water assessment and protection area or wellhead protection area exists, shall be one thousand feet.
- (R) No person shall locate a staging area, stockpile area, or field storage of sewage sludge area in low-lying wet areas or on soils that are frequently flooded. Runoff shall be diverted around a stockpile area or field storage of sewage sludge area using straw bales or other appropriate means of control. Soil conditions, slope, and ground cover shall be reviewed to assure proper drainage. The maximum amount of material to be delivered in one crop year to a staging area, stockpile area, or field storage of sewage sludge area is the agronomic rate of bulk sewage sludge for the authorized site and any contiguous sites. No person shall locate a field storage of sewage sludge area without previous authorization from the division. The division may decrease the maximum time sewage sludge may remain at a stockpile area or

field storage of sewage sludge area or prohibit the use of a stockpile area or field storage of sewage sludge area at a land application site to protect public health or the environment and to minimize the creation of nuisance odors.

- (S) No person shall locate a regional storage of sewage sludge facility without previous authorization from the division. Sewage sludge shall not remain at a regional storage of sewage sludge facility for more than two years. A permit to install, as per Chapter 3745-42 of the Administrative Code, shall be required for the construction of a regional storage of sewage sludge facility. An NPDES permit shall be obtained by the operator of a regional storage of sewage sludge facility prior to any treatment of sewage sludge at the regional storage of sewage sludge facility.
- (T) Facility storage of sewage sludge shall be provided by the permittee such that there shall be no adverse effects from sewage sludge handling at the permittee's treatment works. Facility storage of sewage sludge shall consist of one hundred twenty days sewage sludge storage for the design capacity of the treatment works. Facility storage of sewage sludge may consist of any combination of additional volume in sludge stabilization units (digesters), separate tanks, sewage sludge treatment lagoons, drying beds, dewatered sewage sludge storage pad areas, or other means to store either liquid or dewatered sewage sludge. In lieu of some of the one hundred twenty day facility storage of sewage sludge requirement, a permittee may demonstrate to the director that they have engineered or contracted alternatives to facility storage of sewage sludge in place. Alternatives to facility storage of sewage sludge include, but are not limited to, the following:
- (1) Contracts in effect with a sanitary landfill and sufficient transportation to dispose of sewage sludge that cannot be otherwise managed through facility storage of sewage sludge or other means of use or disposal;
 - (2) Contracts in effect with another permitted facility and sufficient transportation to transfer sewage sludge that cannot be otherwise managed through facility storage of sewage sludge or other means of use or disposal; or
 - (3) Ownership or leasing of, or contracts in effect with, a regional storage of sewage sludge facility and sufficient transportation to transfer sewage sludge that cannot be otherwise managed through facility storage of sewage sludge or other means of use or disposal.
- (U) If the land application of sewage sludge results in a nuisance odor, as determined by the division, the permittee shall be required by the division to minimize the creation of such nuisance odors.
- (1) Until the creation of such nuisance odors has been minimized, as determined by

the division, there shall be no further delivery of sewage sludge to the land application site.

- (2) The director may deauthorize a land application site for repeated nuisance odors determined by the division or violations of Chapter 3745-40 of the Administrative Code. Any deauthorization shall be in accordance with Chapter 3745-47 of the Administrative Code.

Effective:

R.C. 119.032 review dates:

Certification

Date

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