

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 606. OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(OPDES) STANDARDS**

SUBCHAPTER 1. INTRODUCTION

252:606-1-2. Definitions

In addition to terms defined in Title 27A of the Oklahoma Statutes, the following words or terms, when used in this Chapter, have the following meaning unless the context clearly indicates otherwise:

"Approved laboratory" means a laboratory accepted by the DEQ laboratory accreditation program.

"Beneficial use" means the use of biosolids or wastewater through land application for the purpose of soil conditioning, or crop or vegetative fertilization, or erosion control, or the use of wastewater for dust suppression where fugitive dust control would otherwise be an air quality problem, in a manner which does not pollute or tend to pollute the waters of the State of Oklahoma, environment or pose a risk to human health.

"Best professional judgment" or **"BPJ"** means the technical opinion developed by a permit drafter after consideration of all reasonably available and pertinent data or information which forms the basis for the terms and conditions of a discharge permit, and the use of sound engineering analysis of the industry, the nature and quantity of potential pollutants which may be produced and of the proposed treatment plant.

"Biosolids" means primarily organically treated wastewater materials from municipal wastewater treatment plants that are suitable for recycling as a soil amendment ~~amendments~~. This term is within the meaning of "sludge" referenced in 27A O.S. § 2-6-101(11). Biosolids are divided into the following classes:

(A) Class A Biosolids meets the pathogen reduction requirements of 40 CFR § 503.32 (a);

(B) Class B Biosolids meets the pathogen reduction requirements of 40 CFR § 503.32 (b).

"Bypass" means the intentional or unintentional diversion of waste streams from any portion of a treatment, disposal or collection facility.

"Control tests" means chemical, physical or bacteriological tests, including visual observations made by or under the supervision of an operator to control plant performance, determine the quality of plant effluent and determine stream conditions.

"CFR" means the Code of Federal Regulations.

"DEQ" means the Oklahoma Department of Environmental Quality.

"Discharge point" means the point at which pollutants, wastewater or stormwater enters waters of the state or become waters of the state.

"EPA" means the United States Environmental Protection Agency.

"Generator" or **"operator"** means authorized person under whose ownership or management authority, biosolids are used or disposed.

"Impoundment" or **"Surface impoundment"** have the same meaning used in OAC 252:616-1-2.

"Laboratory checks" means chemical, physical or bacteriological tests, including visual observations made on samples submitted by the operator or other authorized

representatives to confirm the quality of the samples or to standardize plant control tests and procedures.

"Land application" means the application of biosolids onto a land surface; injection below land surface; or spreading biosolids onto land surface followed by incorporation into the soil. Land application does not include the disposal of biosolids in a municipal solid waste landfill permitted by the DEQ, or the use of Class A biosolids whose production is permitted by the DEQ.

"Listed metal" means those metals listed in Tables I, II, and III of 40 CFR, Part 503.13.

"Loading rate" means the amount (concentration or mass) of constituents or parameters applied to a unit area per application.

"NRCS" means Natural Resources Conservation Service.

"OAC" means Oklahoma Administrative Code.

"OS" means Oklahoma Statutes.

"Oklahoma Water Quality Standards" means the Oklahoma Water Resources Board rules (OAC 785:45) which classify waters of the state, designate beneficial uses for which the various waters of the state must be maintained and protected, and prescribe the water quality required to sustain designated uses.

"Operating records and reports" means the daily record of data connected with the operation of the system compiled in a monthly report on forms approved by the DEQ.

"Prior converted cropland" means those croplands as defined or used in the Federal Swampbuster Provisions located at Title 16, ~~United States Code~~ USC, §§ 3821 through 3823.

"USC" means United States Code.

"USGS" means United States Geological Survey.

252:606-1-4. Date of federal regulations incorporated

When reference is made to 40 CFR it means, unless otherwise specified, the volume of 40 CFR as published on July 1, ~~2007~~ 2008.

SUBCHAPTER 7. BIOSOLIDS PERMIT REQUIREMENTS [REVOKED]

252:606-7-1. Permit required [REVOKED]

~~Any person who intends to land apply biosolids or incinerate biosolids must obtain a permit.~~

252:606-7-2. Permit applications [REVOKED]

~~All permit applications must be typed or computer printed and include:~~

- ~~(1) the name, address, and telephone number of the applicant or the applicant's authorized representative;~~
- ~~(2) name, mailing address, and telephone number of the generator or operator and the land applier, if different, and contact person from each source;~~
- ~~(3) a brief description of the biosolids including a list of the major commercial or industrial facilities that discharge to the municipal treatment system;~~
- ~~(4) a description of disposal practices and locations of any sites for transfer of the biosolids for treatment, land application, and/or disposal;~~

- ~~(5) laboratory test results of a representative soil sample from each proposed site in the permit application. The composite soil samples must be tested, and background levels set, for the metals listed in Tables 1 and 3 of 40 CFR § 503.13(b), pH, and the nutrients – nitrogen (N), ammonia (NH₄), nitrates (NO₃), potassium (K) and phosphorus (P).~~
- ~~(6) a list of environmental state or federal permits held by the applicant.~~

252:606-7-3. Certification required [REVOKED]

~~When required by the DEQ, the operator must certify that the land application system has been designed according to OAC 252:656 and will be operated according to this Chapter.~~

252:606-7-4. Sludge (biosolids) management plan [REVOKED]

~~A sludge management plan must be submitted with the permit application and include the following:~~

- ~~(1) a copy of the permit application;~~
- ~~(2) a breakdown of the anticipated types and volumes of biosolids generated;~~
- ~~(3) daily generation and annual production of semi-solids, solids as total volume and percent solids converted to dry tons;~~
- ~~(4) laboratory analysis including TCLP reports showing whether the biosolids are hazardous and the chemical and physical properties of biosolids to be land applied including concentrations of metals (listed and other), and any other pollutants;~~
- ~~(5) the amount of biosolids from each source expected to be used or disposed during each year of operation;~~
- ~~(6) a description of treatment methods including pathogen treatment and vector attraction reduction, including plant operational controls and recordkeeping forms that document biosolids treatment;~~
- ~~(7) identification of specific sites and identifying name for each;~~
- ~~(8) documentation of the applicant's right to use the site, including time restrictions, if any;~~
- ~~(9) land use descriptions of adjacent property;~~
- ~~(10) finding descriptions, legal descriptions, and latitude and longitude of each site;~~
- ~~(11) distance to nearest residence;~~
- ~~(12) topography of the site;~~
- ~~(13) soil types, permeability, infiltration and drainage patterns;~~
- ~~(14) proposed methods of field types, tillage, crop types and patterns, crop utilization, expected yield and final use of crop;~~
- ~~(15) irrigation practices, if any;~~
- ~~(16) depth to groundwater, including highest seasonal groundwater level, and any other data available;~~
- ~~(17) records of previous land application conducted at the site, including data on the cumulative metal loading;~~
- ~~(18) results of any sampling, analyses or monitoring previously performed by the applicant at the site, including metal and nutrient assessment, based on an annual and lifetime use;~~
- ~~(19) access controls;~~
- ~~(20) narrative description of buffer zones and other methods to be used to control~~

surface drainage, stormwater runoff, and erosion at each site;

~~(21) information on how biosolids will be transported from the point of generation to the land application or disposal including transfer and storage information and a map showing the location of sources of the biosolids, proposed transportation routes, and the location of related containment, storage, and transfer facilities;~~

~~(22) equipment to be used;~~

~~(23) narrative description of proposed land application method and related details including depth and frequency of incorporation or injection;~~

~~(24) estimated application rate, frequencies, rest periods between applications, and estimated life of the site. Include calculations on which estimates are based for cumulative metal loading rates;~~

~~(25) emergency response plan describing the actions to be taken by the applicant including notice for corrective action and remediation associated with spills and releases;~~

~~(26) NRCS soil map of each specific site which shows soil classification, suitability, and soil profiles to a depth of sixty (60) inches;~~

~~(27) highway map which shows the location of each specific site to communities, cities, towns schools, highway access roads and airports;~~

~~(28) quadrangle topographic map or maps that is an original U.S.G.S. 7.5 minutes series (or 15 minute series if the 7.5 series has not yet been printed) with the following clearly marked:~~

~~(A) boundary of the site;~~

~~(B) public water supply sources and treatment facilities;~~

~~(C) pipelines and utility easements;~~

~~(D) oil or gas wells or drilling sites;~~

~~(E) wellhead delineation areas;~~

~~(F) groundwater flow direction;~~

~~(G) waters of the state with special emphasis for "scenic rivers";~~

~~(H) parks, recreation areas and any government owned land dedicated for special purposes (for example, wildlife refuges)~~

~~(I) identification of the 100-year flood plain or floodway if it affects the proposed site;~~

~~(J) any area inhabited by an endangered or threatened wildlife or plant species listed under Section 4 of the federal Endangered Species Act, 16 U.S.C. 1533(c); and~~

~~(K) any additional information determined necessary by the DEQ.~~

252:606-7-5. Permit modifications [REVOKED]

~~For all changes in permitted sites, methods of land application and treatment, the generator or operator must obtain a permit modification as required by 27A O.S. § 2-6-501(B).~~

252:606-7-6. Restrictions applicable to all land application [REVOKED]

~~(a) **Storage time.** Except facilities permitted by the DEQ (excluding transfer stations), biosolids cannot be stored for greater than six (6) months without prior written approval from the DEQ and in no case longer than one (1) year.~~

~~(b) **Weather.** Do not land apply when the ground is frozen or saturated.~~

~~(c) **Endangered or threatened species.**— Land application cannot occur if it is likely to adversely affect a threatened or endangered species listed under Section 4 of the federal Endangered Species Act, 16 U.S.C. 1533(c), or the critical habitat of such species.~~

~~(d) **Topography.**— A land application site must have minimal slope or be contoured to prevent ponding and soil erosion. No application can occur on land having a slope exceeding five percent (5%) but less than ten percent (10%) unless erosion or runoff controls are implemented for liquid biosolids. Land having a slope greater than ten percent (10%) may be utilized for land application of dewatered and dried biosolids only with DEQ approval.~~

~~(e) **Off-site hauling.**— A generator or operator must prevent biosolids and mud from a land application site from being carried off-site. If necessary, biosolids hauling vehicles must be cleaned prior to leaving the site and the rinse water disposed of in accordance with DEQ rules.~~

~~(f) **Manner.**— Land apply sludge in a manner to prevent surface runoff and to control objectionable odors. Incorporate sludge into the soil before the end of each working day. Do not store or land apply, or allow to runoff, sludge or wastewater to wetlands or waters of the state. Discharges to waters of the state are prohibited without a discharge permit under OAC 252:606.~~

252:606-7-7. Laboratory analyses [REVOKED]

~~All laboratory analyses required by this Chapter must be performed by laboratories certified by the DEQ.~~

252:606-7-8. Compliance required [REVOKED]

~~All permittees must operate the land application site pursuant to the terms of the DEQ issued permit.~~

252:606-7-9. Monitoring wells [REVOKED]

~~The DEQ may require monitor wells and boreholes in connection with the land application of biosolids. These wells must be designed, constructed and plugged in accordance with OAC 785:35.~~

SUBCHAPTER 8. BIOSOLIDS REQUIREMENTS [NEW]

252:606-8-1. Permits and prohibitions

(a) Any person or entity that intends to produce a Class A or a Class B biosolid must obtain a permit and an approved sludge management plan from the DEQ.

(b) For all changes in permitted uses, sites, methods of land application, treatment and sludge management plans the generator or operator must obtain a permit modification as required by 27A O.S. § 2-6-501(B).

(c) Surface disposal under Part 503, Subpart C of 40 CFR, is specifically prohibited. This prohibition does not apply to disposal of biosolids in a municipal solid waste landfill that is permitted by the DEQ.

252:606-8-2. Permit applications

A permit application to produce Class A or Class B biosolids must be typed or

computer printed and include:

- (1) the name, address, and telephone number of the applicant or the applicant's authorized representative;
- (2) the name, mailing address, and telephone number of the generator or operator and the land applier, if different, and contact person from each source;
- (3) a brief description of the biosolids including a list of the major commercial or industrial facilities that discharge to the municipal treatment system;
- (4) a description of the use or disposal practices and locations of any sites for transfer of the biosolids for treatment, use, land application, and/or disposal;
- (5) laboratory test results of a representative soil sample from each proposed site in the permit application. The composite soil samples must be tested, and background levels set, for the metals listed in Tables 1 and 3 of 40 CFR § 503.13(b), pH, and the nutrients - nitrogen (N), ammonia (NH₄), nitrates (NO₃), potassium (K) and phosphorus (P); and
- (6) a list of environmental state or federal permits held by the applicant.

252:606-8-3. Sludge (biosolids) management plan

(a) All sludge management plans must be submitted with the permit application and include the following:

- (1) a breakdown of the anticipated types and volumes of biosolids generated;
- (2) daily generation and annual production of semi-solids, solids as total volume and percent solids converted to dry tons;
- (3) laboratory analysis including TCLP reports showing whether the biosolids are hazardous and the chemical and physical properties of biosolids to be land applied including concentrations of metals (listed and other), and any other pollutants;
- (4) the amount of biosolids from each source expected to be used or disposed during each year of operation;
- (5) a description of treatment methods including pathogen treatment and vector attraction reduction, including plant operational controls and recordkeeping forms that document biosolids treatment;
- (6) irrigation practices, if any; and
- (7) a demonstration that the biosolids shall not be stored for greater than six (6) months without prior written approval from the DEQ, and in no case longer than one (1) year, prior to use, land application or disposal.

(b) In addition to the requirements listed in subsection (a) above, Class A sludge management plans must be submitted with the following additional information:

- (1) the proposed schedule for the laboratory analysis to determine the presence or absence of fecal coliform or salmonella;
- (2) the amount of Class A biosolids expected to be generated and produced each year;
- (3) proposed application process for the Class A biosolids;
- (4) a list of proposed uses for the Class A biosolids;
- (5) whether the Class A biosolids will be made available to the general public;
- (6) a fact sheet describing the proper uses and agronomic rates of the Class A biosolids that shall be distributed when the general public is receiving the Class A biosolids; such fact sheets shall not be required when the generator itself uses the Class A biosolids; and

(7) description of the storage of the Class A biosolids until used or distributed.

(c) In addition to the requirements listed in subsection (a) above, Class B sludge management plans must be submitted with the following additional information:

(1) information on how biosolids will be transported from the point of generation to the use, land application or disposal site, including transfer and storage information and a map showing the location of sources of the biosolids, proposed transportation routes, and the location of related containment, storage, and transfer facilities;

(2) the amount of biosolids from each source expected to be used or disposed during each year of operation;

(3) identification of specific sites and identifying name for each;

(4) documentation of the applicant's right to use the site, including time restrictions, if any;

(5) land use descriptions of adjacent property;

(6) finding description(s), legal description(s), and latitude and longitude of each site;

(7) distance to nearest residence;

(8) topography of the site;

(9) soil types, permeability, infiltration and drainage patterns;

(10) proposed methods of field types, tillage, crop types and patterns, crop utilization, expected yield and final use of crop;

(11) depth to groundwater, including highest seasonal groundwater level, and any other data available;

(12) records of previous land application conducted at the site, including data on the cumulative metal loading;

(13) results of any sampling, analyses or monitoring previously performed by the applicant at the site, including metal and nutrient assessment, based on an annual and lifetime use;

(14) access controls;

(15) narrative description of buffer zones and other methods to be used to control surface drainage, stormwater runoff, and erosion at each site;

(16) documentation demonstrating how the biosolids will be incorporated into the soil before the end of each working day;

(17) documentation that the biosolids will not be land applied within two (2) feet of the highest seasonal water table nor applied to the land within one hundred (100) feet of a stream or body of water;

(18) documentation that the biosolids will not be land applied within two hundred fifty (250) feet of a public or private water supply;

(19) equipment to be used;

(20) narrative description of proposed land application method and related details including depth and frequency of incorporation or injection;

(21) estimated application rate, frequencies, rest periods between applications, and estimated life of the site. Include calculations on which estimates are based for cumulative metal loading rates;

(22) emergency response plan describing the actions to be taken by the applicant, including notice for corrective action and remediation associated with spills and releases;

(23) NRCS soil map of each specific site which shows soil classification, suitability,

and soil profiles to a depth of sixty (60) inches;

(24) highway map which shows the location of each specific site as relative to communities, cities, towns, schools, highway access roads and airports;

(25) quadrangle topographic map or maps that is an original U.S.G.S. 7.5 minute series (or 15 minute series if the 7.5 series has not yet been printed) with the following clearly marked:

(A) boundary of the site;

(B) public water supply sources and treatment facilities;

(C) pipelines and utility easements;

(D) oil or gas wells or drilling sites;

(E) wellhead delineation areas;

(F) groundwater flow direction;

(G) waters of the state with special emphasis for "scenic rivers";

(H) parks, recreation areas and any government owned land dedicated for special purposes (for example, wildlife refuges);

(I) identification of the 100-year flood plain or floodway if it affects the proposed site;

(J) any area inhabited by an endangered or threatened wildlife or plant species listed under Section 4 of the federal Endangered Species Act, 16 U.S.C. 1533(c); and

(K) any additional information determined necessary by the DEQ.

252:606-8-4. Class A biosolid production

(a) The construction of facilities to produce a Class A biosolid shall be permitted by the DEQ and meet the requirements located in OAC 252:656-19.

(b) Compost.

(1) Composted Class A biosolids are produced by:

(A) combining the biosolids produced at a wastewater treatment plant with wood chips or other source of carbon approved by the DEQ;

(B) the materials being heated, through the controlled biological decomposition of organic material that has been sanitized through the generation of heat and processed to further reduce pathogens in accordance with the requirements contained in 40 CFR, Part 503, and stabilized to the point that the material is beneficial to plant growth through:

(i) the within-vessel composting method or the static aerated pile composting method where the temperature of the sewage sludge is maintained at 55° Celsius (131° Fahrenheit) or higher for three (3) or more consecutive days; or

(ii) the windrow composting method wherein the temperature of the sewage sludge is maintained at 55° Celsius (131° Fahrenheit) or higher for fifteen (15) or more days. During the period when the compost is maintained at 55° Celsius (131° Fahrenheit) or higher for fifteen (15) or more days, there shall be a minimum of five (5) turnings of the windrow;

(C) the combined material being removed to a second location to complete the curing process; and

(D) being processed or tested to demonstrate that the material meets the pathogen reduction requirements of 40 CFR § 503.32 (a) and the vector

attraction reduction requirements of 40 CFR § 503.33 prior to use.

(2) Upon completion of the process, the compost may be used as described in the sludge management plan.

(c) Other Class A biosolid production methods.

(1) For all other Class A production methods, the following requirements must be met:

(A) The applicant shall submit to the DEQ a plan for the production of the Class A biosolids, which must receive approval from the DEQ;

(B) The applicant shall perform a pilot study on the DEQ approved process for at least one (1) year to determine that the process meets the requirements of 40 CFR § 503.32 (a) and 40 CFR § 503.33;

(C) The Class A biosolid production method shall include a process for the biosolids to be dewatered, unless a waiver of the dewatering requirement is granted by the DEQ;

(D) The process shall be approved by EPA; and

(E) The applicant shall receive a final approval from the DEQ before distributing the Class A biosolid.

(2) Upon completion of the requirements at OAC 252:606-8-4(c)(1), the Class A biosolid may be used as described in the sludge management plan.

252:606-8-5. Class B biosolid production

(a) The construction of facilities to produce Class B biosolids shall be permitted by the DEQ and meet the requirements located in OAC 252:656.

(b) Prior to use, the Class B biosolids shall be processed and/or tested and must meet the pathogen reduction requirements of 40 CFR § 503.32 (b) and vector attraction reduction requirements of 40 CFR § 503.33.

(c) Class B biosolids may be disposed in a landfill permitted by the DEQ or may be land applied pursuant to the requirements of state law and the requirements of this subchapter, in accordance with the DEQ approved sludge management plan.

252:606-8-6. Land application of biosolids

(a) **Compliance.** All permittees shall operate a land application site pursuant to the terms of the DEQ issued permit and DEQ approved sludge management plan.

(b) Requirements.

(1) **Certification.** When required by the DEQ, the owner, generator or operator must certify that the land application system will be operated according to this Chapter.

(2) **One applier.** A land application site shall be used by only one land applier at a time unless the DEQ approves other users.

(3) **Subsequent use for land application.** The DEQ may approve a previously used land application site for subsequent land application.

(4) **Multiple sources.** A land applier who owns or operates more than one source facility or surface impoundment may utilize the same land application site for the application of biosolids from the multiple facilities or impoundments with prior written approval of the DEQ.

(5) **Topography.** A land application site must have minimal slope or be contoured to prevent ponding and soil erosion. No application can occur on land having a slope exceeding five percent (5%) but less than ten percent (10%) unless erosion or

runoff controls are implemented for liquid biosolids. Land having a slope greater than ten percent (10%) may be utilized for land application of dewatered and dried biosolids only with DEQ approval.

(6) **Off-site hauling.** The owner, generator or operator must prevent biosolids and mud from a land application site from being carried off-site. If necessary, biosolids hauling vehicles must be cleaned prior to leaving the site and the rinse water disposed of in accordance with DEQ rules.

(7) **Manner.** Land apply sludge in a manner to prevent surface runoff and to control objectionable odors. Incorporate sludge into the soil before the end of each working day . Do not store or land apply, or allow to run off, sludge or wastewater to wetlands or waters of the state. Discharges to waters of the state are prohibited without a discharge permit under OAC 252:606.

(8) **pH limits.** Any site with soil having a natural pH of less than 5.5 cannot be used for the land application of biosolids unless the soil pH is amended prior to application of biosolids. Documentation of soil amendment must be placed in the land applier's compliance records.

(9) **Phosphorus and nitrogen.** Annual biosolids land application rate cannot exceed nitrogen and phosphorus rates for the crop grown and cannot be applied in rates that result in phytotoxicity.

(10) **Soil sampling.**

(A) **Sample and analysis.** All background and annual soil sampling and analyses must be of a composite sample taken from an area 80 acres or less in size for each site proposed or used for the land application of biosolids. The DEQ may approve larger sampling areas on a case by case basis. Soil testing procedures applicable for use in the local area in accordance with Oklahoma State University soil testing guidance or the local NRCS may be used.

(B) **Operational soil monitoring.** A land applier must collect representative soil samples and have them analyzed as follows:

(i) For soil pH and the nutrients - nitrogen (N), ammonia (NH₄), nitrates (NO₃), potassium (K) and phosphorus (P) prior to the next annual application of biosolids;

(ii) For metals in Table 3 of 40 CFR § 503.13(b) after every third year of use prior to the fourth year of use; and

(iii) For all required background metals prior to the fourth year of biosolids application on each site.

(11) **Laboratory analyses.** All laboratory analyses required by this Chapter must be performed by an approved laboratory.

(12) **Monitoring wells.** The DEQ may require monitor wells and boreholes in connection with the land application of biosolids. These wells must be designed, constructed and plugged in accordance with OAC 785:35.

(c) **Restrictions.**

(1) **Weather.** Do not land apply when the ground is frozen or saturated.

(2) **Endangered or threatened species.** Land application cannot occur if it is likely to adversely affect a threatened or endangered species listed under Section 4 of the federal Endangered Species Act, 16 U.S.C. 1533(c), or the critical habitat of such species.

(3) **Metal and selenium concentration limits.** A land applier must notify the

DEQ by telephone within 24 hours and follow up with a written report if the metal or selenium concentrations exceed those in 40 CFR § 503.13(b)(3) (Table 3) or risk the revocation of the land application permit. Municipal biosolids that exceed the metal or selenium concentration limits set forth in 40 CFR, § 503.13(b)(1) (Table 1) cannot be land applied, but may be:

(A) incinerated at an incinerator permitted by the DEQ; or

(B) disposed at a solid waste landfill permitted by the DEQ for such waste disposal. Any biosolids disposed in a landfill must meet the pathogen and vector reduction requirements of this Subchapter.

(4) **Heavy Metals.** The DEQ shall not approve the land application of biosolids that contains heavy metals above the concentration ranges normal to biosolids or sludges with a demonstrated effectiveness on Oklahoma soils, unless the permittee provides a study on the effects of the biosolids on a variety of Oklahoma soils and crops found at the location of the proposed land application site. Said study shall:

(A) be conducted by a qualified research institute familiar with crops and soils in Oklahoma and approved by the DEQ;

(B) be included with the sludge management plan; and

(C) demonstrate the effect of the sludge during four (4) growing seasons.

(5) **Biosolids generated outside the State of Oklahoma.** For municipal biosolids, whether Class A or Class B generated outside the State of Oklahoma, the biosolids produced shall meet all federal and state statutory requirements and the DEQ shall receive and approve test results demonstrating the quality of the biosolids, including samples of each load of biosolids performed by an independent laboratory approved by the DEQ and an agreement that the DEQ may perform random quality assurance sampling at the site of the generation of the biosolids prior to any biosolids coming into the State of Oklahoma.

(6) **Karst soils.** The use of land application sites that overlie areas subject to karstification (i.e. sink holes or underground streams generally occurring in areas underlain by limestone, gypsum or dolomite), is prohibited, unless approved by the DEQ.

SUBCHAPTER 9. LAND APPLICATION OF BIOSOLIDS [REVOKED]

252:606-9-1. Prohibitions [REVOKED]

~~Surface disposal under Part 503, Subpart C of 40 CFR, is specifically prohibited. This prohibition does not apply to disposal of biosolids in a municipal solid waste landfill that is permitted by the DEQ.~~

252:606-9-2. Land application exceptions and alternatives [REVOKED]

~~(a) **Metal and selenium concentration limits.** Municipal biosolids that exceed the metal or selenium concentration limits set forth in 40 CFR, § 503.13(b)(1) (Table 1) cannot be land applied, but may be:~~

~~(1) incinerated at an incinerator permitted by the DEQ; or~~

~~(2) disposed at a solid waste landfill permitted by the DEQ for such waste disposal. Any biosolids disposed in a landfill must meet the pathogen and vector reduction requirements of this Subchapter.~~

~~(b) **Notification.** A land applier must notify the DEQ by telephone within 24 hours and follow up with a written report if the metal or selenium concentrations exceed those in 40 CFR § 503.13(b)(3) (Table 3) or risk the revocation of the land application permit.~~

252:606-9-3. Site use for land application [REVOKED]

~~(a) **One applier.** A land application site must be used by only one land applier at a time unless the DEQ approves other users.~~

~~(b) **Subsequent use for land application.** The DEQ may approve a previously used land application site for subsequent land application.~~

~~(c) **Multiple sources.** A land applier who owns or operates more than one source facility or surface impoundment may utilize the same land application site for the application of biosolids from the multiple facilities or impoundments with prior written approval of the DEQ.~~

252:606-9-4. pH and nutrient limits [REVOKED]

~~(a) **pH limits.** Any site with soil having a natural pH of less than 5.5 cannot be used for the land application of biosolids unless the soil pH is amended prior to application of biosolids. Documentation of soil amendment must be placed in the land applier's compliance records.~~

~~(b) **Phosphorus and nitrogen.** Annual biosolids land application rate cannot exceed nitrogen and phosphorus rates for the crop grown and cannot be applied in rates that result in phytotoxicity.~~

252:606-9-5. Soil sampling [REVOKED]

~~(a) **Sample and analysis.** All background and annual soil sampling and analyses must be of a composite sample taken from an area 80 acres or less in size for each site proposed or used for the land application of biosolids. The DEQ may approve larger sampling areas on a case by case basis. Soil testing procedures applicable for use in the local area in accordance with Oklahoma State University soil testing guidance or the local NRCS may be used.~~

~~(b) **Operational soil monitoring.** A land applier must collect representative soil samples and have them analyzed as follows:~~

- ~~(1) For soil pH and the nutrients - nitrogen (N), ammonia (NH₄), nitrates (NO₃), potassium (K) and phosphorus (P) prior to the next annual application of biosolids;~~
- ~~(2) For metals in Table 3 of 40 CFR § 503.13(b) after every third year of use prior to the fourth year of use; and~~
- ~~(3) For all required background metals prior to the 4th year of biosolids application on each site.~~