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## States' Application Restrictions Statutes & Regulations: *Texas*



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# A National Agricultural Law Center Research Publication

## States' Application Restrictions Statutes & Regulations: Texas

TX Water Code § 26.001 (10), (13), (14), (21)

TX Water Code § 26.011

TX Water Code § 26.0136

TX Water Code § 26.027

30 TX Admin Code § 321.38(28)

30 TX Admin Code § 321.36(e)

30 TX Admin Code § 321.40

30 TX Admin Code § 321.46(a)

*The statutes and Constitution are current through the 2018 regular and special legislative sessions. The statutes are subject to changes by the Texas Legislative Council.*

### **TX Water Code § 26.001. Definitions.**

As used in this chapter:

- (1) "Board" means the Texas Water Development Board.
- (2) "Commission" means the Texas Natural Resource Conservation Commission.
- (3) "Executive administrator" means the executive administrator of the Texas Water Development Board.
- (4) "Executive director" means the executive director of the Texas Natural Resource Conservation Commission.
- (5) "Water" or "water in the state" means groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.



(6) "Waste" means sewage, industrial waste, municipal waste, recreational waste, agricultural waste, or other waste, as defined in this section.

(7) "Sewage" means waterborne human waste and waste from domestic activities, such as washing, bathing, and food preparation.

(8) "Municipal waste" means waterborne liquid, gaseous, or solid substances that result from any discharge from a publicly owned sewer system, treatment facility, or disposal system.

(9) "Recreational waste" means waterborne liquid, gaseous, or solid substances that emanate from any public or private park, beach, or recreational area.

(10) "Agricultural waste" means waterborne liquid, gaseous, or solid substances that arise from the agricultural industry and agricultural activities, including without limitation agricultural animal feeding pens and lots, structures for housing and feeding agricultural animals, and processing facilities for agricultural products. The term:

(A) includes:

(i) tail water or runoff water from irrigation associated with an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Section 26.502; or

(ii) rainwater runoff from the confinement area of an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Section 26.502; and

(B) does not include tail water or runoff water from irrigation or rainwater runoff from other cultivated or uncultivated range land, pasture land, and farmland or rainwater runoff from an area of land located in a major sole source impairment zone, as defined by Section 26.502, that is not owned or controlled by an operator of an animal feeding operation or concentrated animal feeding operation on which agricultural waste is applied.

(11) "Industrial waste" means waterborne liquid, gaseous, or solid substances that result from any process of industry, manufacturing, trade, or business.

(12) "Other waste" means garbage, refuse, decayed wood, sawdust, shavings, bark, sand, lime, cinders, ashes, offal, oil, tar, dyestuffs, acids,



chemicals, salt water, or any other substance, other than sewage, industrial waste, municipal waste, recreational waste, or agricultural waste.

(13) "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any water in the state. The term:

(A) includes:

(i) tail water or runoff water from irrigation associated with an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone as defined by Section 26.502; or

(ii) rainwater runoff from the confinement area of an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Section 26.502; and

(B) does not include tail water or runoff water from irrigation or rainwater runoff from other cultivated or uncultivated rangeland, pastureland, and farmland or rainwater runoff from an area of land located in a major sole source impairment zone, as defined by Section 26.502, that is not owned or controlled by an operator of an animal feeding operation or concentrated animal feeding operation on which agricultural waste is applied.

(14) "Pollution" means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(15) "Sewer system" means pipelines, conduits, storm sewers, canals, pumping stations, force mains, and all other constructions, devices, and appurtenant appliances used to transport waste.

(16) "Treatment facility" means any plant, disposal field, lagoon, incinerator, area devoted to sanitary landfills, or other facility installed for the purpose of treating, neutralizing, or stabilizing waste.

(17) "Disposal system" means any system for disposing of waste, including sewer systems and treatment facilities.



(18) "Local government" means an incorporated city, a county, a river authority, or a water district or authority acting under Article III, Section 52, or Article XVI, Section 59 of the Texas Constitution.

(19) "Permit" means an order issued by the commission in accordance with the procedures prescribed in this chapter establishing the treatment which shall be given to wastes being discharged into or adjacent to any water in the state to preserve and enhance the quality of the water and specifying the conditions under which the discharge may be made.

(20) "To discharge" includes to deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

(21) "Point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants or wastes are or may be discharged into or adjacent to any water in the state.

(22) "Identified state supplement to an NPDES permit" means any part of a permit on which the commission has entered a written designation to indicate that the commission has adopted that part solely in order to carry out the commission's duties under state statutes and not in pursuance of administration undertaken to carry out a permit program under approval by the Administrator of the United States Environmental Protection Agency.

(23) "NPDES" means the National Pollutant Discharge Elimination System under which the Administrator of the United States Environmental Protection Agency can delegate permitting authority to the State of Texas in accordance with Section 402(b) of the Federal Water Pollution Control Act.

(24) "Treatment works" means any devices and systems used in the storage, treatment, recycling, and reclamation of waste to implement this chapter or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including:

(A) intercepting sewers, outfall sewers, pumping, power, and other equipment and their appurtenances;

(B) extensions, improvements, remodeling, additions, and alterations of the items in Paragraph (A) of this subdivision;

(C) elements essential to provide a reliable recycled supply such as standby treatment units and clear-well facilities;



(D) any works, including sites and acquisition of the land that will be a part of or used in connection with the treatment process or is used for ultimate disposal of residues resulting from such treatment;

(E) any plant, disposal field, lagoon, canal, incinerator, area devoted to sanitary landfills, or other facilities installed for the purpose of treating, neutralizing, or stabilizing waste; and

(F) facilities to provide for the collection, control, and disposal of waste heat.

(25) "Person" means an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

(26) "Affected county" is a county to which Subchapter B, Chapter 232, Local Government Code, applies.

### **TX Water Code § 26.011. In General.**

Except as otherwise specifically provided, the commission shall administer the provisions of this chapter and shall establish the level of quality to be maintained in, and shall control the quality of, the water in this state as provided by this chapter. Waste discharges or impending waste discharges covered by the provisions of this chapter are subject to reasonable rules or orders adopted or issued by the commission in the public interest. The commission has the powers and duties specifically prescribed by this chapter and all other powers necessary or convenient to carry out its responsibilities. This chapter does not apply to discharges of oil covered under Chapter 40, Natural Resources Code.

### **TX Water Code § 26.0136. Water Quality Management.**

(a) The commission is the agency with primary responsibility for implementation of water quality management functions, including enforcement actions, within the state. Water quality management functions shall be oriented on a watershed basis in consideration of the priorities identified by river authorities and basin steering committees. The commission by rule shall coordinate the water quality responsibilities of river authorities within each watershed and shall, where appropriate, delegate water quality functions to local governments under Section 26.175 of this code. The State Soil and Water Conservation Board shall coordinate and administer all programs for abating agricultural or silvicultural nonpoint source pollution, as provided by Section 201.026, Agriculture Code.

(b) Nothing in this section is intended to enlarge, diminish, or supersede the water quality powers, including enforcement authority, authorized by law for river authorities, the State Soil and Water Conservation Board,



and local governments. Nothing in this section is intended to enlarge, diminish, or supersede the responsibilities of the Texas Agricultural Extension Service and the Texas Agricultural Experiment Station to conduct educational programs and research regarding nonpoint source pollution and related water resource and water quality matters.

(c) The commission shall establish rules to make the optimum use of state and federal funding and grant programs related to water quality programs of the commission.

(d) In this section, "river authority" has the meaning assigned by Section 26.0135(i) of this code.

### **TX Water Code § 26.027. Commission May Issue Permits.**

(a) The commission may issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state. No permit shall be issued authorizing the discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste. The commission may refuse to issue a permit when the commission finds that issuance of the permit would violate the provisions of any state or federal law or rule or regulation promulgated thereunder, or when the commission finds that issuance of the permit would interfere with the purpose of this chapter.

(b) A person desiring to obtain a permit or to amend a permit shall submit an application to the commission containing all information reasonably required by the commission. The commission shall, at minimum, require an applicant who is an individual to provide:

- (1) the individual's full legal name and date of birth;
- (2) the street address of the individual's place of residence;
- (3) the identifying number from the individual's driver's license or personal identification certificate issued by the state or country in which the individual resides;
- (4) the individual's sex; and
- (5) any assumed business or professional name of the individual filed under Chapter 71, Business & Commerce Code.

(c) A person may not commence construction of a treatment facility until the commission has issued a permit to authorize the discharge of waste from the facility, except with the approval of the commission.



(d) The commission may not require under this chapter any permit for the placing of dredged or fill materials into or adjacent to water in the state for the purpose of constructing, modifying, or maintaining facilities or structures, but this does not change or limit any authority the commission may have with respect to the control of water quality. The commission may adopt rules and regulations to govern and control the discharge of dredged or fill materials consistent with the purpose of this chapter.

### **30 TX Admin Code § 321.36. Texas Pollutant Discharge Elimination System General Requirements for Concentrated Animal Feeding Operations (CAFOs).**

(a) Applicability. These requirements apply to a concentrated animal feeding operation (CAFO) subject to the requirements of the Texas Pollutant Discharge Elimination System, unless otherwise noted.

(b) Permits. A CAFO shall comply with § 305.125 of this title (relating to Standard Permit Conditions) and all applicable permit conditions contained in commission rules. Requirements to provide for and ensure compliance with standards set by the rules of the commission and the laws of Texas shall be determined and included in an individual water quality permit on a case-by-case basis to reflect the best method for attaining such compliance. Each permit shall contain terms and conditions as the commission determines necessary to protect human health and safety, and the environment.

(c) Nutrient management plan (NMP).

(1) The operator of a large CAFO shall develop and implement an NMP certified by a person or entity identified in § 321.32(10) of this title (relating to Definitions) to be in accordance with the Texas Natural Resources Conservation Service NRCS Practice Standard Code 590. The plan shall include site-specific nutrient management practices that ensure appropriate agricultural utilization of nutrients in the manure, sludge, or wastewater. The NMP shall be updated annually. The operator shall determine the amount, in tons/acre or acre-inches/acre, of manure, sludge, and wastewater for each land management unit (LMU) using the following methodology:

(A) determine the phosphorus index rating using the Agronomy Technical Note No. 15 Phosphorus Assessment Tool of Texas;

(B) determine the maximum annual application rate using Appendix 5 of the NRCS Practice Standard Code 590 for Texas;

(C) determine the crop requirement or the crop removal rate, as appropriate, from the S Crops Table as contained in



the Texas NRCS 590-Software Tool, site-specific historic CAFO yield data, or other sources as approved by the executive director; and

(D) account for:

(i) the results of soil tests required by § 321.40(m)(1)(B) of this title (relating to Concentrated Animal Feeding Operation (CAFO) Land Application Requirements);

(ii) credits for all nitrogen in the soil that will be available for plant use;

(iii) the amount of nitrogen and phosphorus in the manure and wastewater to be applied;

(iv) consideration of multi-year phosphorus application (for any LMU where nutrients are applied at a rate based on crop phosphorus requirement, the methodology must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement); and

(v) all other additions of plant available nitrogen and phosphorus to the LMU (i.e., from sources other than manure or wastewater or credits for residual nitrogen).

(2) Terms of the NMP include the following:

(A) animal type and authorized head count;

(B) LMU and application acreage for each LMU;

(C) crops (including alternative crops) identified in the NMP with their yield goals for each LMU;

(D) the maximum application rates for nitrogen and phosphorus for each crop in each LMU;

(E) the methodology in paragraph (1) of this subsection (including formulas, sources of data, protocols for making determinations, etc.) and actual data used to calculate application rates; and

(F) any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied.

(3) Changes to a NMP. Any changes, except changes resulting from annual recalculation, must be submitted to the executive director.

The NMP will be reviewed by the executive director to determine if



changes require revisions to the terms of the NMP. Revisions to terms of the NMP can be substantial or non-substantial.

(4) Substantial and non-substantial changes. Those changes that constitute a substantial change are defined in § 321.32(56) of this title. Non-substantial changes include, but are not limited to, changes to the site-specific LMU information in the Phosphorus index Worksheet, changes to the maximum application rate of nitrogen or phosphorus to be land applied or changes in the phosphorus index rating.

(5) If changes to the terms of the NMP are determined to be substantial, the changes must be incorporated into the permit in accordance with § 321.33(g) of this title (relating to Applicability and Required Authorizations).

(6) If changes to the terms of the NMP are determined to be non-substantial, the executive director will notify the permittee and include the revised permit in the permit record.

(7) The CAFO operator shall create, maintain for five years, and make available to the executive director, upon request, a copy of the site-specific NMP and records of manure and wastewater application.

(d) Compliance with the requirements of this section and applicable requirements of this subchapter constitute compliance with the provisions of 40 Code of Federal Regulations (CFR) §122.42(e)(1)(i) - (ix).

(e) Buffers for LMUs. A sinkhole shall be protected with a 100-foot buffer from manure, sludge, and wastewater application. Alternatively, the CAFO may substitute a 35-foot wide vegetative buffer around a sinkhole where alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 100-foot buffer.

(f) Soil sampling and testing procedures for dairy CAFOs, both state-only and Texas Pollutant Discharge Elimination System, located in a major sole-source impairment zone.

(1) Initial sampling. Before commencing land application of manure, sludge, or wastewater on an LMU, the operator shall collect and analyze at least one representative soil sample from each of the LMUs according to the following procedures. The CAFO operator is not required to collect soil samples or report on LMUs where manure, litter, or wastewater has not been applied during the preceding year. The CAFO operator



must comply with the initial sampling requirement before resuming land application to such LMUs.

(2) Annual sampling. The TCEQ or its designee shall annually collect soil samples, according to the following procedures, for each LMU owned, operated, controlled, rented or leased by the CAFO operator where manure, litter, or wastewater was applied during the preceding year. The results of these analyses shall be used in determining the application rates for manure, sludge and wastewater.

(3) Sampling procedures. Soil sampling procedures shall employ sampling procedures using accepted techniques of soil science for obtaining representative samples and analytical results.

(A) Samples shall be collected using approved procedures described in this section and the agency's publication, RG-408 entitled "Soil Sampling for Concentrated Animal Feeding Operations."

(B) Samples shall be collected by the Texas Commission on Environmental Quality or its designee and analyzed by a soil testing laboratory within the same 45-day time frame each year (from 45 days prior to until 45 days after the date of the previous year's sampling date), except when crop rotations or inclement weather require a change in the sampling time frame.

(C) One composite sample shall be obtained for each soil depth zone per uniform soil type (soils with the same characteristics and texture) within each LMU.

(D) Composite samples shall be comprised of 10 - 15 randomly sampled cores obtained from each of the following soil depth zones:

(i) Zone 1: zero to six inches (for an LMU where the manure is incorporated directly into the soil) or zero to two inches (for an LMU where the manure is not incorporated into the soil). Wastewater is considered to be incorporated. If a zero to two-inch sample is required under this subsection, then an additional sample from the two to six-inch soil depth zone shall be obtained in accordance with the provisions of this section; and

(ii) Zone 2: six to 24 inches.



(4) Laboratory analysis. Laboratory analysis of the soil samples shall be performed for physical and chemical parameters to include: nitrate as nitrogen in parts per million (ppm), extractable phosphorus (ppm, using Mehlich III with Inductively Coupled Plasma (ICP)), potassium (extractable, ppm); sodium (extractable, ppm); magnesium (extractable, ppm); calcium (extractable, ppm); soluble salts (ppm) or electrical conductivity (deciSiemens/meter (dS/m) or millimhos/cm (mmhos/cm) - determined from extract of 2:1 volume to volume (v/v) water/soil mixture); and soil water pH.

(g) Annual report required. An annual report shall be submitted to the executive director's Office of Compliance and Enforcement, Enforcement Division, by March 31 of each year (for the reporting period of January 1 to December 31 of the previous year, or the actual 12-month reporting period used by the CAFO) from each CAFO authorized under a CAFO general permit or through an individual water quality permit in accordance with this subchapter. The report shall be submitted on forms prescribed by the executive director and shall include, but is not limited to, the following information:

- (1) number and type of animals, whether in open confinement or housed under roof;
- (2) estimated total manure, sludge, and wastewater generated during the reporting period;
- (3) total manure, sludge, and wastewater land applied during the reporting period;
- (4) total manure, sludge, and wastewater transferred to other persons during the reporting period;
- (5) total number of acres for land application under the control of the CAFO operator, including both the acres included in the NMP for the CAFO and the total number of acres used during the reporting period for land application;
- (6) summary of discharges of manure, sludge, or wastewater from the production area that occurred during the reporting period including dates, times, and approximate volume;
- (7) a statement indicating that the NMP under which the CAFO is operating was developed or revised and approved by a certified nutrient management specialist;
- (8) a copy of the initial soil analysis for each LMU, regardless of whether manure, sludge, or wastewater has been applied;



- (9) soil monitoring reports of all soil samples collected in accordance with the requirements of this subchapter;
- (10) groundwater monitoring reports if applicable;
- (11) the actual crop(s) planted and yield(s) for each LMU;
- (12) the actual nitrogen and phosphorus content of the manure, sludge, and process wastewater that was land applied;
- (13) the data used in calculations and the results of calculations conducted in accordance with subsection (c) of this section;
- (14) the amount of manure, sludge, and wastewater applied to each LMU during the reporting period;
- (15) any supplemental fertilizer applied during the reporting period; and
- (16) any other information requested by the executive director.

### **30 TX Admin Code § 321.38. Control Facility Design Requirements Applicable to Concentrated Animal Feeding Operations (CAFOs).**

(a) Purpose. The purpose of this section is to describe the control facility design requirements that apply to concentrated animal feeding operations (CAFOs). Any CAFO operator that does not use a retention control structure (RCS) is not subject to subsections (e), (f), and (g) of this section.

(b) Well buffers. Except as provided by subsection (c) of this section, the control facility of an animal feeding operation (AFO) shall be separated from a well by ensuring a minimum buffer zone, as described in this subsection. An AFO shall not locate a new RCS or holding pen within the required well buffer zones:

- (1) public drinking water supply wells - 500 feet;
- (2) drinking water wells used for private water supply - 150 feet; or
- (3) water wells used exclusively for agriculture irrigation - 100 feet.

(c) Buffer variance. A CAFO operating under an existing authorization may continue the operation and use of any existing land management units (LMUs), holding pens and RCSs located within the required well buffer zones provided they are in accordance with the recharge feature evaluation and certification required under § 321.34(f)(3) of this title (relating to Permit Applications). For new wells drilled after July 20, 2004, documentation supporting variances of the buffer zones that were previously authorized shall be kept on site and made available to agency personnel upon request.



(d) 100-year flood plain. All control facilities, including holding pens and RCSs, shall be located outside of the 100-year flood plain unless the facility is protected from inundation and damage that may occur during the 100-year flood event.

(e) RCS design capacity. The following design requirements apply to any CAFO.

(1) The design of a control facility shall include measures that will be used to minimize entry of uncontaminated runoff into RCSs.

(2) Any CAFO constructing a new or modifying an existing RCS shall ensure that the design specifications and completed construction specifications are certified by a licensed Texas professional engineer. The failure to obtain the certifications or to maintain records verifying the certifications is a violation of this subchapter.

(3) Except as provided in this subsection, each RCS, at a minimum, shall be designed and constructed in accordance with the technical standards developed by the Natural Resources Conservation Service (NRCS), American Society of Agricultural and Biological Engineers, American Society of Civil Engineers, American Society of Testing Materials, or other technical standard approved by the executive director that are in effect at the time of construction. Where site-specific variations are warranted, a licensed Texas professional engineer shall document these variations and their appropriateness to the design.

(4) Any existing RCS that has been properly maintained without any modifications and has no apparent structural problems or leakage is considered to be properly designed with respect to the RCS sizing, embankment design and construction, and liner requirements of this section, provided that any required documentation was completed in accordance with the requirements at the time of construction. If no documentation exists, the RCS must be certified by a licensed Texas professional engineer as providing protection equivalent to the requirements of this section.

(5) Any RCS documented to have been built in accordance with site-specific NRCS plans and specifications is considered to be in compliance with the design and capacity requirements of this subchapter provided that:

(A) the site-specific conditions are the same as those used by the NRCS to develop the plan (numbers of animals, runoff area, manure, sludge, and wastewater generated, etc.); and



(B) the RCS is operated and maintained in accordance with NRCS requirements.

(6) The production area of a new or expanding AFO shall not be constructed in any stream, river, lake, wetland, or playa, except as provided in § 321.41 of this title (relating to Special Requirements for Discharges to a Playa).

(7) The design plan must include documentation of the sources of information, assumptions, and calculations used in determining the appropriate volume capacity of the RCSs. Poultry (chickens and turkeys), swine, or veal calf CAFOs subject to the new source performance standards in subparagraph (B) of this paragraph shall be designed in accordance with subparagraphs (B) and (C) of this paragraph or subparagraphs (B) and (D) of this paragraph. For all other CAFOs, the volume must include design rainfall event runoff and normal operating capacity requirements in accordance with subparagraphs (A) and (C) of this paragraph or design rainfall event runoff and evaporation systems in accordance with subparagraphs (A) and (D) of this paragraph.

(A) Design rainfall event runoff. All CAFOs, other than poultry (chickens and turkeys), swine, or veal calf CAFOs subject to the new source performance standards in subparagraph (B) of this paragraph, shall have an RCS designed and constructed to meet or exceed the capacity required to contain the runoff and direct precipitation from the 25-year, 24-hour rainfall event, except as required by § 321.42(c) of this title (relating to Requirements Applicable to the Major Sole-Source Impairment Zone) or authorized under § 321.37(d)(3) of this title (relating to Effluent Limitations for Concentrated Animal Feeding Operation (CAFO) Production Areas).

(B) New source swine, veal, or poultry (chickens and turkeys) CAFOs. Any swine, veal, or poultry (chickens and turkeys) CAFO subject to the new source performance standards in 40 Code of Federal Regulations (CFR) §412.46 shall have an RCS designed and constructed such that no discharge will occur in accordance with the following:

(i) Information used in the design of the RCS shall include, but is not limited to, the following: design rainfall event, additional minimum capacity for chronic rainfalls identified in the evaluation required by clause (ii) of this subparagraph, the requirements of



subparagraph (C) or (D) of this paragraph, additional storage capacity for wastewater intended to be transferred to another recipient at a later time, and any other factors that would affect the sizing of the RCS.

(ii) An evaluation of the adequacy of the designed RCS using the most recent version of the Soil Plant Air Water (SPAW) Hydrology Tool, or other tool approved by the executive director. The evaluation must include all inputs to SPAW including, but not limited to, daily precipitation, temperature, and evaporation data for the previous 100 years, user-specified soil profiles representative of the LMUs, planned crop rotations consistent with the nutrient management plan, and the final modeled result of no discharges from the designed RCS. For those CAFOs where 100 years of local weather data is not available, a simulation with a confidence interval analysis conducted over a period of 100 years may be used.

(C) Design capacity requirements for systems using irrigation.

(i) The RCS shall be designed for the authorized number of animals to include any storage volume required by a hydrologic needs analysis (water balance) that documents that the typical irrigation demands of the adopted crop and irrigated land area will not be exceeded.

(ii) Precipitation inputs to the water balance shall be the average monthly precipitation reported in a National Weather Service current publication.

(iii) The consumptive use requirements of the cropping system shall be developed on a monthly basis, and shall be calculated as a part of the water balance.

(iv) The maximum required storage value calculated by the water balance shall not encroach on the storage volume required for the design rainfall event.

(v) Wastewater application rates used in the water balance shall not induce uncontrolled runoff or create tailwater that causes a discharge.

(vi) All process-generated wastewater produced during a 21-day or greater period.



(vii) Any other relevant volume needed in the water balance, including any required under the air standard permit in § 321.43 of this title (relating to Air Standard Permit for Animal Feeding Operations (AFOs)).

(D) Design requirements for evaporation systems. Evaporation systems shall be designed:

(i) to withstand a ten-year (consecutive) period of maximum recorded monthly rainfall (other than catastrophic). In any month in which a catastrophic rainfall event occurs, the water balance shall replace such an event with not less than the long-term average rainfall for that month as determined by a water balance; and

(ii) to maintain sufficient volume to contain rainfall and rainfall runoff from the design rainfall event without overflow. The depth for this volume must be at least one vertical foot allocated within the RCS above the volume required in clause (i) of this subparagraph.

(f) Dewatering system. An irrigation system or other liquid removal system used by an AFO must be designed to ensure that the system is capable of dewatering the RCSs on a regular schedule. RCSs shall be equipped with irrigation or wastewater removal systems capable of dewatering the RCSs whenever needed to restore the operating capacity. Dewatering equipment shall be maintained in proper working order.

(g) RCS embankment and liner design.

(1) For RCSs where the depth of water impounded against the embankment at the spillway elevation is three feet or more, the RCS is considered to be designed with an embankment. The pollution prevention plan shall include a description of the design specifications for the RCS embankments. The following design specifications are required for all new construction or the modified portions of existing RCSs.

(A) Soils used in the embankment shall be free of foreign material such as rocks larger than four inches, trash, brush, and fallen trees.

(B) The embankment shall be constructed in lifts or layers no more than eight inches compacted to six inches thick at a



minimum compaction effort of 95% Standard Proctor Density (ASTM D698) at -1% to +3% optimum moisture content.

(C) All embankment walls shall be stabilized to prevent erosion or deterioration.

(D) Embankment construction must be accompanied by certified compaction tests including in-place density and moisture in accordance with ASTM D1556, D2167, or D2937 for density and D2216, D4634, D4944, or D4959 for moisture, and D2922-91 or D6938-07 for moisture and density, or equivalent testing standards.

(E) Additional protection for new or modified portions of existing RCSs that are constructed with embankments designed to contain runoff from a drainage area shall be constructed with a spillway or other outflow device properly sized according to NRCS design and specifications to protect the integrity of the embankment.

(F) For all new construction or the modified portions of existing RCSs, each RCS must have a minimum of two vertical feet of freeboard constructed with materials equivalent to those used at the time of design and construction between the top of the embankment and the structure's spillway. RCSs without spillways must have a minimum of two vertical feet of freeboard between the top of the embankment and the required storage capacity.

(2) For all new construction and for all structural modifications of existing RCSs, each RCS must meet the requirements for lack of hydrologic connection or have a liner consistent with subparagraph (B), (C), or (D) of this paragraph.

(A) This subparagraph applies to lack of hydrologic connection requirements. Documentation must show that there will be no significant leakage from the RCS; or that any leakage from the RCS will not migrate to water in the state. A permit or authorization will require documentation of the lack of hydrologic connection certified by a licensed Texas professional engineer or licensed Texas professional geoscientist and must include information on the hydraulic conductivity and thickness of the natural materials underlying and forming the walls of the containment structure up to the wetted perimeter. If it is claimed that no significant leakage would result from the use of in-situ materials, documentation must be provided that leakage will not



migrate to waters in the state. The operator must at a minimum include maps showing groundwater flow paths, or that the leakage enters a confined environment. A permit or authorization will require a written determination by an NRCS engineer, a licensed Texas professional engineer or a licensed Texas professional geoscientist that a liner is not needed to prevent a significant hydrologic connection between the contained wastewater and waters in the state.

(B) This subparagraph applies to RCS liners using in-situ material. In-situ material is undisturbed, in-place, native soil material. In-situ materials must at least meet the minimum criteria for hydraulic conductivity, thickness, and calculated specific discharge, as described in subparagraph (C) of this paragraph. Samples shall be collected and analyzed in accordance with subparagraph (E) of this paragraph. This documentation must be certified by a licensed Texas professional engineer or licensed Texas professional geoscientist.

(C) This subparagraph applies to constructed or installed earthen liners. Constructed or installed liners must be designed by a licensed Texas professional engineer. The liner must be constructed in accordance with the design and certified as such by a licensed Texas professional engineer. Compaction tests and post construction sampling and analyses will provide support for the liner certification. Liners shall be designed and constructed to have hydraulic conductivities no greater than  $1 \times 10^{-7}$  centimeters per second (cm/sec), with a thickness of 1.5 feet or greater or its equivalency in other materials, and not to exceed a specific discharge through the liner of  $1.1 \times 10^{-6}$  cm/sec calculated using Darcy's Law with the water level at the spillway depth. Constructed or installed liners must be designed and constructed to meet the soil requirements, lift requirements, and compaction testing requirements identified in the permit or authorization. The operator shall maintain the liner to minimize the percolation of wastewater through the liner.

(D) This subparagraph applies to geosynthetic liners. Geosynthetic liners that meet the specific discharge requirements in subparagraph (C) of this paragraph are acceptable if certified by a licensed Texas professional engineer. Documentation must be presented to the executive director for review and approval before putting into service. Installation of the liner shall be



certified by a licensed professional engineer that the liner and subgrade were completed according to the manufacturer's recommendations and current standards. Seams shall be completed in accordance with the manufacturer's requirement. When wedge weld seams are used, non-destructive seam testing shall be conducted on the complete length of the wedge weld by standard air pressure testing. The certification must document compliance with all of the following standards: ASTM D5888 Storage and Handling of Geosynthetic Clay Liners, ASTM D5889 Quality Control of Geosynthetic Clay Liners, and ASTM D6102 Guide for Installation of Geosynthetic Clay Liners.

(E) This subparagraph applies to liner sampling and analyses of in-situ material and earthen liners.

(i) The licensed Texas professional engineer or licensed Texas professional geoscientist shall use best professional practices to ensure that corings or other liner samples will be appropriately plugged with material that also meets liner requirements of this subsection.

(ii) Samples shall be collected in accordance with ASTM D1587 or other method approved by the executive director. For each RCS, a minimum of two core samples collected from the bottom of the RCS and a minimum of at least one core sample from each sidewall. Additional samples may be necessary based on the best professional judgment of the licensed professional engineer. Distribution of the samples shall be representative of liner characteristics, and proportional to the surface area of the sidewalls and floor. Documentation shall be provided identifying the sample locations with respect to the RCS liner.

(iii) For earthen liners, undisturbed samples shall be analyzed for hydraulic conductivity in accordance with ASTM D5084, whole pond seepage analysis as described in ASABE Paper Number 034130, Double Ring Infiltrometer (stand pipe), or other method approved by the executive director.

(F) A permit or authorization shall include provisions whereby the executive director may, upon written notice, require the operator to install a leak detection system or monitoring well(s),



based upon a determination that significant potential exists for the contamination of water in the state or drinking water.

(G) Documentation of lack of hydrologic connection, liner, and capacity certifications by a licensed Texas professional engineer or licensed Texas professional geoscientist must be completed for each RCS and kept on site.

(h) Manure storage. The AFO operator shall provide manure storage capacity based upon manure and waste production, land availability, and the NRCS Field Office Technical Guide or equivalent standards. When manure is stockpiled, it shall be stored in a well-drained area with no ponding of water, and the top and sides of stockpiles shall be adequately sloped to ensure proper drainage. Runoff from manure storage piles must be retained on site. If the manure areas are not roofed or covered with impermeable material, protected from external rainfall, or bermed to protect from runoff in the case of the design rainfall event, the manure areas must be located within the drainage area of the RCS and accounted for in the design calculations of the RCS.

### **30 TX Admin Code § 321.40. Concentrated Animal Feeding Operation (CAFO) Land Application Requirements.**

(a) The purpose of this section is to describe the land application requirements that apply to concentrated animal feeding operations (CAFOs).

(b) The land application of manure, sludge, or wastewater at agronomic rates and hydrologic needs shall not be considered surface disposal and is not prohibited.

(c) Manure, sludge, or wastewater may be applied to the areas in the 100-year flood plain at agronomic rates not to exceed the hydrologic needs of the crop.

(d) Discharge of manure, sludge, or wastewater from a land management unit (LMU) is prohibited and shall not cause or contribute to a violation of surface water quality standards, contaminate groundwater, or create a nuisance condition.

(e) Irrigation practices shall be managed so as to minimize ponding or puddling of wastewater on the site, prevent tailwater discharges to waters in the state, and prevent the occurrence of nuisance conditions.

(f) Land application shall not occur when the ground is frozen or saturated or during rainfall events unless in accordance with § 321.39(b)(3) of this title (relating to Operational Requirements Applicable to Concentrated Animal Feeding Operations (CAFOs)) or as approved by the commission.



(g) The CAFO operator shall not locate a new LMU within the required well buffer zones identified in § 321.38(b) of this title (relating to Control Facility Design Requirements Applicable to Concentrated Animal Feeding Operations (CAFOs)), unless additional wellhead protective measures are implemented that will prevent pollutants from entering the well and contaminating groundwater. An exception to the full well buffer zone for a private drinking water well or a water well used exclusively for agricultural irrigation may be approved by the executive director if a licensed Texas professional engineer or licensed Texas professional geoscientist provides accurate documentation showing that additional wellhead protective measures will be or have been implemented that will prevent pollutants from entering the well and contaminating groundwater. Additional protective measures may include a sanitary seal, annular seal, a steel sleeve, or surface slab.

(h) Vegetative buffer strips shall be maintained in accordance with Natural Resources Conservation Service (NRCS) Practice Standard Code 393. The minimum buffer shall be no less than 100 feet of vegetation to be maintained between manure, sludge, or wastewater application areas and water in the state. A buffer is not required for wastewater irrigation when applied by low-pressure, low-profile center pivot irrigation systems in areas of the state where the annual average rainfall is less than 25 inches per year. Land application of manure, sludge, and wastewater into surface water in the state is an unauthorized discharge and is prohibited.

(i) CAFOs introducing wastewater or chemicals to water wellheads for the purpose of irrigation shall install backflow prevention devices in accordance with requirements contained in 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers) and Chapter 290 of this title (relating to Public Drinking Water), as appropriate.

(j) Nighttime application of manure, sludge, or wastewater by a CAFO shall be allowed only in areas with no occupied residence(s) within 1/4 mile from the outer boundary of the actual area receiving manure, sludge, or wastewater application. In areas with an occupied residence within 1/4 mile from the outer boundary of the actual area receiving manure, sludge, or wastewater application, application shall only be allowed from one hour after sunrise until one hour before sunset, unless the current resident owner or lessee of such residences have agreed in writing to specified nighttime applications.

(k) Nutrient requirement.

(1) Any land application of manure, sludge, and wastewater shall not exceed the planned crop requirements. Land application rates of



manure, sludge, or wastewater shall be based on the total nutrient concentration, on a dry weight basis, where applicable.

(2) Critical phosphorus level. Land application of manure, sludge, or wastewater shall not exceed the crop removal rate when results of the annual soil analysis for extractable phosphorus indicate:

(A) a level greater than 200 parts per million (ppm) for a particular LMU; or

(B) a level greater than 350 ppm for an LMU where the average annual rainfall is 25 inches or less and erosion control is adequate to keep erosion at the soil loss tolerance (T) or less and the closest edge of the field is more than one mile from a named stream; or

(C) if ordered by the executive director to do so in order to protect water in the state.

(3) Dairy CAFOs located in a major sole-source impairment zone shall develop a nutrient utilization plan (NUP) when the annual soil analysis for extractable phosphorus in zone 1 (0 - 6-inch incorporated; 0 - 2 or 2 - 6-inch if not incorporated) depth in an LMU is greater than 200 ppm. State-only CAFOs shall develop a NUP when the annual soil analysis for an LMU indicates the critical phosphorus levels in paragraph (2) of this subsection have been exceeded. A nutrient management plan, based on crop removal certified as meeting the NRCS Practice Standard Code 590 is equivalent to the requirements for a NUP.

(A) If an operator is required to develop a NUP, the operator shall cease land application of manure, sludge, or wastewater to the affected area and may resume only after a NUP is implemented.

(B) The NUP must be developed and certified by:

(i) an employee of the NRCS;

(ii) a nutrient management specialist certified by the NRCS;

(iii) the Texas State Soil and Water Conservation Board;

(iv) Texas AgriLife Extension Service;

(v) an agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas;

(vi) a Certified Professional Agronomist certified through the certification program of the American Society of Agronomy;



(vii) a Certified Professional Soil Scientist certified through the certification program of the Soil Science Society of America; or

(viii) a licensed geoscientist-soil scientist in Texas after approval by the executive director based on a determination by the executive director that another person or entity identified in this subparagraph cannot develop the plan in a timely manner.

(C) After a NUP is implemented, the operator shall land apply in accordance with the NUP until soil phosphorus is reduced below the critical phosphorus level. Thereafter, the operator of a dairy CAFO located in a major sole-source impairment zone shall implement the requirements of the nutrient management plan certified in accordance with § 321.36(c) of this title (relating to Texas Pollutant Discharge Elimination System General Requirements for Concentrated Animal Feeding Operations (CAFOs)) and the operator of other state-only CAFOs must follow the requirements in this section.

(D) Land application under the terms of the NUP may begin 30 days after the plan is filed with the executive director, unless before that time the executive director has returned the plan for failure to comply with all the requirements of this subsection.

(l) Runoff from an LMU. Where manure, sludge, or wastewater is applied in accordance with a site-specific nutrient management plan that complies with § 321.36(c) of this title or when the land application conforms to this section, precipitation-related runoff from LMUs is authorized as:

(1) a pollutant discharge if the source is land associated with a CAFO in a major sole-source impairment zone; or

(2) an agricultural stormwater discharge for all other sources.

(m) Sampling and Testing.

(1) Initial sampling. Before commencing land application of manure, sludge, or wastewater on LMUs and before resuming land application on LMUs where manure, sludge, or wastewater was not applied during the preceding year, the operator shall:

(A) collect and analyze at least one representative sample of manure, sludge (if applicable), and wastewater for total nitrogen, total phosphorus, and total potassium;



(B) collect and analyze at least one representative soil sample from each LMU according to the procedures in paragraphs (4) and (5) of this subsection; and

(C) utilize the results of these analyses in determining application rates for manure, sludge, and wastewater.

(2) Annual Sampling. The operator shall:

(A) collect and analyze at least one representative sample of manure, sludge (if applicable), and wastewater for total nitrogen, total phosphorus, and total potassium;

(B) collect and analyze at least one representative soil sample from each LMU where manure, sludge, or wastewater was applied during the preceding year according to the procedures in paragraphs (4) and (5) of this subsection; and

(C) utilize the results of these analyses in determining application rates for manure, sludge, and wastewater.

(3) The operator shall make the most recent nutrient analysis available to any recipient of manure, sludge, or wastewater.

(4) Sampling procedures. The operator shall employ sampling procedures using accepted techniques of soil science for obtaining representative samples and analytical results.

(A) Samples shall be collected using approved methods described in the agency's guidance RG-408 entitled "Soil Sampling for Concentrated Animal Feeding Operations."

(B) Samples shall be collected by the operator or its designee and analyzed by a soil testing laboratory annually, except when crop rotations or inclement weather require a change in the sampling time. The pollution prevention plan shall contain documentation to explain the reasons for adjusting the sampling timeframe.

(C) Obtain one composite sample for each LMU and per uniform soil type (soils with the same characteristics and texture) within the LMU.

(D) Composite samples shall be comprised of 10 - 15 randomly sampled cores at a depth of zero to six inches.

(5) Laboratory analysis. The operator shall have a laboratory analysis of the soil samples performed for physical and chemical



parameters to include: nitrate reported as nitrogen in ppm; phosphorus (extractable, ppm, using Mehlich III extractant with Inductively Coupled Plasma analysis); potassium (extractable, ppm); sodium (extractable, ppm); magnesium (extractable, ppm); calcium (extractable, ppm); soluble salts (ppm) or electrical conductivity (deciSiemens/meter (dS/m) or millimhos/cm (mmhos/cm) determined from extract of 2:1 volume to volume (v/v) water/soil mixture); and soil water pH (soil:water, 1:2 ratio).

### **30 TX Admin Code § 321.46. Concentrated Animal Feeding Operation (CAFO) Pollution Prevention Plan, Site Evaluation, Recordkeeping, and Reporting.**

(a) Pollution prevention plan (PPP).

(1) A permit or authorization will establish requirements for the development of a PPP. PPPs shall be prepared in accordance with good engineering practices and shall include measures necessary to limit the discharge of pollutants to or adjacent to water in the state. The plan shall describe and ensure the implementation of practices which are to be used to assure compliance with the limitations and conditions of this subchapter. The plan shall identify a specific individual(s) at the facility who is responsible for development, implementation, operation, maintenance, inspections, recordkeeping, and revision of the PPP. The activities and responsibilities of the pollution prevention personnel shall address all aspects of the facility's PPP.

(2) The plan shall be signed by the operator or other signatory authority in accordance with § 305.44 of this title (relating to Signatories to Applications), and the plan shall be retained on site.

(3) Upon completion of a PPP review, the executive director may notify the operator of a concentrated animal feeding operation (CAFO) at any time that the plan does not meet one or more of the minimum requirements of this subchapter. After such notification from the executive director, the operator shall make changes to the plan within 90 days after such notification, unless otherwise provided by the executive director.

(4) The operator of the CAFO shall revise the plan:

(A) before any change in the acreage or boundaries of land management units (LMUs);

(B) before any increase in the maximum number of animals;



- (C) before operation of any new control facilities;
- (D) before any change which has a significant effect on the potential for the discharge of pollutants to water in the state;
- (E) if the PPP is not effective in achieving the general objectives of controlling discharges of pollutants from the production area or LMU(s); or
- (F) within 90 days following written notification from the executive director that the plan does not meet one or more of the minimum requirements of this section.

(5) Where design, planning, construction, operation and maintenance, or other documentation equivalent to PPP requirements are contained in site specific-plans prepared and certified by the Natural Resources Conservation Service (NRCS), Texas State Soil and Water Conservation Board, or their designee, that information may be used to document best management practices (BMPs) or applicable portions of the technical requirements in this subchapter. Where provisions in the certified plan are substituted for applicable BMPs or portions of the PPP, the PPP must refer to the appropriate section of the certified plan. If the PPP contains a reference to a certified plan, a copy of the certified plan must be kept with the PPP.

(6) Potential pollutant sources include any activity or material of sufficient quantity that may reasonably be expected to add pollutants to surface water in the state from the facility. The owner shall conduct a thorough site inspection of the facility to identify all potential pollutant sources. The inspection shall include all land that is part of the production area and LMUs. An evaluation of pollutant sources shall identify the types of potential pollutant sources, provide a description of the pollutant sources, and indicate all measures that will be used to prevent contamination from the pollutant sources.

(7) The operator shall maintain and update the following items as part of the PPP:

- (A) a site map, showing the production area and include, at a minimum, pens and open lots, barns, berms, permanent manure storage areas, composting areas, control facilities including retention control structures (RCSs), water wells (abandoned and in use), surface water in the state, and dead animal burial sites; including a depiction of buffer zones and setbacks;



(B) LMU Map, showing the boundary and acreage of each LMU; all buffer zones, the location of the production area, water wells (abandoned and in use) that are onsite or within 500 feet of the facility boundary, all surface water in the state located onsite and within one mile of the facility boundary, and the facility boundary.

(C) soil, crop, and crop nutrient information;

(D) a description of land application procedures and equipment used; and

(E) a description of BMPs utilized to minimize the entry of uncontaminated runoff into the control facility and RCS.

(b) Management documentation. A permit or authorization will establish additional requirements for recordkeeping and documentation. At a minimum, these records must include:

(1) a copy of the administratively complete and technically complete individual water quality permit application, notice of intent seeking authorization under a CAFO general permit, and the written authorization issued by the commission or executive director, for any facility required to obtain written authorization;

(2) the RCS management plan, if applicable;

(3) procedures for spill prevention and recovery;

(4) a copy of the recharge feature certification, if applicable;

(5) the groundwater monitoring plan associated with the use of a playa;

(6) a copy of the comprehensive nutrient management plan, nutrient management plan or nutrient utilization plan, if required;

(7) site-specific documentation that no significant hydrologic connection exists between the contained wastewater and water in the state;

(8) any written agreement with a landowner which documents the allowance of nighttime application of manure, sludge, or wastewater;

(9) the odor control plan requirements established in § 321.43 of this title (relating to Air Standard Permit for Animal Feeding Operations (AFOs)); and

(10) documentation of employee training, including dates when training occurred and, for dairy outreach program area (DOPA)-



required training, verification of the date, time of attendance, and completion of training.

(c) Required inspections. The CAFO operator shall perform the routine inspections described in this subsection to determine preventive maintenance and repair needs. Inspections shall include visual inspections and equipment testing to determine conditions that could cause breakdowns or failures resulting in discharge of pollutants to water in the state or the creation of a nuisance condition.

(1) CAFO operators shall conduct a daily inspection of all water lines, including drinking water and cooling water lines that are located within the drainage area of the RCSs. These daily inspections shall be recorded in the PPP either daily or in the weekly report.

(2) CAFO operators shall conduct a weekly inspection of all control facilities and equipment used during that week for land application of manure, sludge, or wastewater. An inspection must include all stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to each RCS. The weekly inspection will note the level of liquid in each RCS as indicated by the pond marker.

(3) CAFO operators shall conduct monthly inspections on mortality management systems, including containers, burial sites, composting facilities, incinerators, and chemical storage and disposal areas.

(4) A complete site inspection of the CAFO and LMUs shall be conducted and documentation of the findings of the inspection made at least once per year. The inspection shall include:

(A) a review of the list of potential pollutant sources to ensure it is current;

(B) the inspection of all controls and operations outlined in the PPP to reduce the potential for pollutants to be transported off the CAFO; and

(C) updating the PPP to reflect the current conditions.

(5) Once every five years, beginning five years after initial authorization under this subchapter, any CAFO operator who uses an RCS shall have a licensed Texas professional engineer review the existing engineering documentation, complete a site evaluation of the structural controls, and review existing liner documentation. The engineer shall complete



and certify a report of their findings that must be kept with the PPP.

(d) Recordkeeping requirements. The CAFO operator shall keep records in the PPP for a minimum of five years from the date the record was created. Upon written request, any of the records maintained to comply with the permit shall be submitted to the executive director within five business days of the operator receiving the request. The records shall document the inspections and actions taken in response to deficiencies identified during any inspection. A CAFO operator shall correct all the deficiencies within 30 days or shall document the factors preventing immediate correction and submit to the executive director an explanation of the factors that prevented the correction of the deficiencies. Any CAFO operator that does not use an RCS is not subject to paragraphs (3) - (6) and (8) of this subsection. The following records must be included unless otherwise specified:

- (1) a list of any significant spills of potential pollutants at the CAFO that have a significant potential to reach water in the state;
- (2) a log of wastewater, manure, and sludge removed from the CAFO, other than single pickup truck loads, that shows the dates and times of removal from the CAFO, name and address of the recipient, amount (in wet tons, dry tons, cubic yards, acre-inches, acre-feet, or gallons) of manure, sludge, or wastewater;
- (3) a log of all daily measurable rainfall events, including the measured rainfall;
- (4) a log of all weekly wastewater levels observed in the RCS, or daily wastewater levels in a major sole-source impairment zone;
- (5) documentation of liner maintenance by an NRCS engineer, licensed Texas professional engineer, or qualified groundwater scientist;
- (6) documentation describing the sources of information, assumptions, and calculations used in determining the appropriate volume capacity and structural features of each RCS, including embankments and liners;
- (7) groundwater monitoring records, if required by § 321.41 of this title (relating to Special Requirements for Discharges to a Playa);
- (8) records that show the control facilities have been inspected for structural integrity and maintenance, the date of each inspection, and a description of the findings;
- (9) records describing mortality management practices;



(10) a log of all manure, sludge, and wastewater used at the CAFO updated at least monthly. For CAFOs where manure, sludge, or wastewater is applied on LMUs, such records must include the following information:

- (A) date of manure, sludge, or wastewater application to each LMU;
- (B) location of the specific LMU and the volume applied during each application event;
- (C) acreage of each individual crop on which manure, sludge, or wastewater is applied;
- (D) basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU, including sources of nutrients other than manure, sludge, or wastewater on a dry basis;
- (E) the percentage of moisture content of the manure;
- (F) actual annual yield of each harvested crop; and
- (G) weather conditions (such as the temperature, precipitation, and cloud cover) during the land application and 24 hours before and after the land application;

(11) annual nutrient analysis for irrigation wastewater, sludge, if applicable, and manure;

(12) documentation describing any discharge into water in the state including the date, time, volume of overflow, a copy of the notification(s) provided to the regional office, and sample analysis results associated with the discharge;

(13) the results of initial and annual soil analysis reports as required by this subchapter; and

(14) copies of all notifications to the executive director, including any made to a Texas Commission on Environmental Quality regional office, as required by this subchapter, a permit, or authorization.

(e) Reporting requirements.

(1) The CAFO operator shall furnish to the appropriate regional Texas Commission on Environmental Quality office and the commission's Office of Compliance and Enforcement, Enforcement Division in Austin, soil testing analysis of all soil samples with the annual report due February 15 of each year.



(2) CAFO operators shall provide all other reports required by this subchapter to the Office of Compliance and Enforcement, Enforcement Division.

