SUBCHAPTER B: ANIMAL FEEDING OPERATIONS §§321.31 - 321.47

§321.31. Manure, litter and Wastewater Discharge and Air Emission Limitations.

(a) There shall be no discharge or disposal of manure, litter, or wastewater from an animal feeding operation into or adjacent to waters in the state, except in accordance with an individual permit issued by the commission, or a concentrated animal feeding operation (CAFO) general permit or other authorization by the commission. Manure, litter and wastewater generated by an ~~a~~ animal feeding operation (AFO) under this subchapter shall be retained and utilized in an appropriate and beneficial manner as provided by commission rules, orders, authorizations, CAFO general permits, or individual permits.

(b) AFOs shall be operated in such a manner as to prevent the creation of a nuisance or a condition of air pollution as mandated by Texas Health and Safety Code, Chapters 341 and 382.

§321.32. Definitions.

All definitions in Texas Water Code (TWC), Chapter 26 and Chapter 305 of this title (relating to Consolidated Permits) shall apply to this subchapter and are incorporated by reference. The following words

and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) **Agronomic rates** - The land application of manure, litter or wastewater at rates of application in accordance with a plan for nutrient management which will enhance soil productivity and provide the crop or forage growth with needed nutrients for optimum health and growth.

(2) **Air contaminant** - Particulate matter, radioactive material, dust, fumes, gas, mist, smoke, vapor, or odor or any combination thereof produced by processes other than natural. Water vapor is not an air contaminant.

(3) **Animal feeding operation** (AFO) - A lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or postharvest residues in the normal growing season over any portion of the lot or facility. Two or more animal feeding operations under common ownership are a single AFO if they adjoin each other, or if they use a common area or system for beneficial use of wastes. A land management unit (LMU) is not part of an AFO.

(4) **Aquifer** - A saturated permeable geologic unit that can transmit, store, and yield to a well, the quality and quantities of groundwater sufficient to provide for a beneficial use. An aquifer can be composed

of unconsolidated sands and gravels, permeable sedimentary rocks such as sandstones and limestones, and/or heavily fractured volcanic and crystalline rocks. Groundwater within an aquifer can be confined, unconfined, or perched.

(5) **Area land use map-** A map that identifies property lines, permanent odor sources, and distances and direction to any residences, animal feeding operations, businesses, public parks, or occupied structures within a one-mile radius of the permanent odor sources at the AFO. The map shall include the north arrow, scale of map, the buffer distances, and date that the map was generated and the date that the distances were verified.

(6) **Beneficial Use** – Application of manure, litter, or waste water to land in a manner that does not exceed the agronomic need or rate for a cover crop. Application of manure or wastewater on the land at a rate below or equal to the optimal agronomic rate is considered a beneficial use.

(7) **Best management practices (BMPs)** - The schedules of activities, prohibitions of practices, maintenance procedures, and other management and conservation practices to prevent or reduce the pollution of water in the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge, land application, or drainage from raw material storage.

(8) **Catastrophic conditions** - conditions which cause structural or mechanical damage to the facility from natural events including high winds, tornados, hurricanes, or other natural disasters, other than rainfall events.

(9) **Certified nutrient management specialist** - An individual who is currently certified as a nutrient management specialist through a United States Department of Agriculture-Natural Resources Conservation Service recognized certification program or organization.

(10) **Chronic or catastrophic rainfall event** - a series of rainfall events which would not provide opportunity for dewatering and which would be equivalent to or greater than the 25-year, 24-hour rainfall event or any single event which would be equivalent to or greater than the 25-year, 24-hour rainfall event.

(11) **Certified Water Quality Management Plan** - A site specific plan for agricultural or silvicultural lands that includes appropriate land treatment practices, production practices, management measures, technologies or combinations thereof which when implemented will achieve a level of pollution prevention or abatement determined by the Texas State Soil Water Conservation Board, in consultation with the local Soil and Water Conservation District and TCEQ, to be consistent with state water quality standards.

(12) **Concentrated animal feeding operation (CAFO)** - Any AFO defined as follows:

(A) **Large CAFO** - any AFO which stables or confines and feeds or maintains for a total of 45 days or more in any 12-month period equal to or more than the numbers of animals specified in any of the following categories:

(i) 1,000 cattle other than mature dairy cattle or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;

(ii) 1,000 veal calves;

(iii) 700 mature dairy cattle (whether milkers or dry cows);

(iv) 2,500 swine weighing more than 55 pounds or 10,000 swine weighing less than 55 pounds;

(v) 500 horses;

(vi) 10,000 sheep or lambs;

(vii) 55,000 turkeys;

(viii) 125,000 chickens (other than laying hens if the operation does not use a liquid waste handling system);

(ix) 30,000 laying hens or broilers (if the operation uses liquid manure handling system) or 82,000 laying hens (if the operation does not use a liquid waste handling system); or

(x) 5,000 ducks (if the operation uses liquid manure handling system) or 30,000 ducks (if the operation does not use a liquid waste handling system);

(B) **Medium CAFO** - any AFO with the following number of animals that discharges pollutants into water in the state either through a man-made ditch, flushing system, or other similar man-made device, or directly into water in the state which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with animals confined in the operation:

(i) 300 to 999 cattle other than mature dairy cattle or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;

(ii) 200 to 699 mature dairy cattle (whether milking or dry cows);

(iii) 300 to 999 veal calves;

(iv) 750 to 2,499 swine each weighing 55 pounds or more, or 3,000 to 9,999 swine each weighing less than 55 pounds;

(v) 150 to 499 horses;

(vi) 3,000 to 9,999 sheep or lambs;

(vii) 16,500 to 54,999 turkeys;

(viii) 37,500 to 124,999 chickens (other than laying hens and other than liquid manure handling system);

(ix) 9,000 to 29,999 laying hens or broilers (if liquid manure handling system) or 25,000 to 81,999 laying hens (if other than liquid manure handling system); or

(x) 1,500 to 4,999 ducks (if liquid manure handling system) or 10,000 to 29,999 ducks (if other than liquid manure handling system).

(C) Small CAFO - an AFO that is designated by the executive director as a CAFO because it is a significant contributor of pollutants into water in the state and is not a large or medium CAFO.

(D) **State-only CAFO** - An AFO that falls within the range of animals in subparagraph (B) of this paragraph and that is either located in the Dairy Outreach Program Areas or designated by the executive director as a CAFO because it is a significant contributor of pollutants into water in the state. A state-only CAFO is not authorized under TPDES requirements.

(13) **Control facility** - Any system used for the collection and retention of manure, litter or wastewater on the premises until their ultimate use or disposal. This includes all collection ditches, conduits, and swales for the collection of runoff and wastewater, and all retention control structures.

(14) **Crop removal -** The amount of nutrients contained in and removed by harvest of the previous year's crop.

(15) **Crop requirement -** The amount of nutrients that must be present in the soil in order to insure that the crop nutrient needs are met, while accounting for nutrients that may become unavailable to the crop due to adsorption to soil particles or other natural causes.

(16) **Dairy outreach program areas** - The area including all of the following counties: Erath, Bosque, Hamilton, Comanche, Johnson, Hopkins, Wood, and Rains.

(17) **Edwards Aquifer** - That portion of an arcuate belt of porous, waterbearing predominantly carbonate rocks known as the Edwards (Balcones Fault Zone) Aquifer trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devils River Limestone, Person Formation, Kainer Formation, Edwards Group, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

(18) **Edwards Aquifer recharge zone** - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area delineated as such on official maps located in the appropriate regional office and groundwater conservation districts.

(19) **Groundwater** - Subsurface water that occurs below the water table in soils and geologic formation that are saturated, and is other than underflow of a stream or an underground stream

(20) **Historical waste application field** - An area of land located in a major sole-source impairment zone, as defined in this section, that at any time since January 1, 1995, has been owned or controlled by an operator of a CAFO on which agricultural waste from a CAFO has been applied.

(21) **Hydrologic connection** - The connection and exchange between surface and groundwater.

(22) **Lagoon** - A RCS used for the biological treatment of liquid organic wastes. Lagoons can be aerobic, anaerobic, or facultative depending on their design and can be used in series to produce a higher quality effluent. Treatment volume is included in the lagoon design.

(23) **Land application** - The removal of manure, litter or wastewater associated with the AFO including distribution to, or incorporation into, the soil mantle primarily for beneficial use purposes.

(24) **Land management unit** (LMU) - An area of land owned, operated, controlled, rented or leased by an AFO owner or operator to which manure, litter or wastewater from the AFO is or may be applied. This includes land associated with a single center pivot system or a tract of land on which similar soil characteristics exist and similar management practices are being used. Land management units include historical waste application fields. The term "land management unit" does not apply to any lands not owned, operated, controlled, rented or leased by the AFO operator for the purpose of off-site land application of manure, wherein the manure is given or sold to others for land application.

(25) **Letter of consent** - A document signed by the owner or the authorized legal representative of the owner(s) of an occupied residence or business structure, school (including associated recreational areas), church, or public park specifically allowing a CAFO to locate a permanent odor source closer to an occupied residence or business structure, school (including associated recreational areas), church, or

public park than allowed under §321.43 of this title (relating to Air Standard Permit for Animal Feeding Operations).

(26) **Liner** - Any barrier in the form of a layer, membrane or blanket, naturally existing, constructed or installed to prevent a significant hydrologic connection between liquids contained in retention control structures and water in the state.

(27) **Liquid waste handling system** - A system in which freshwater or wastewater is recycled and used in transporting waste.

(28) **Major sole-source impairment zone** - A watershed that contains a reservoir:

(A) that is used by a municipality as a sole source of drinking water supply for a population, inside and outside of its municipal boundaries, of more than 140,000; and

(B) at least half of the water flowing into which is from a source that, on September 1, 2001, is on the list of impaired state waters adopted by the commission as required by 33 United States Code, §1313(d), as amended:

(i) at least in part because of concerns regarding pathogens and phosphorus; and

(ii) for which the commission, at some time, has prepared and submitted a total maximum daily load standard.

(29) **Manure** - Feces and/or urine excreted by animals. Manure includes manure, bedding, compost, feed, and other raw materials commingled with feces and/or urine.

(30) **New source** - New source is defined in §305.2 of this title (relating to Definitions). The criteria for new source determination are in §305.534(b) of this title (relating to New Sources and Dischargers).

(31) **Nuisance** - Any discharge of air contaminant(s) including, but not limited to, odors of sufficient concentration and duration that are or may tend to be injurious to or which adversely affects human health or welfare, animal life, vegetation, or property, or which interferes with the normal use and enjoyment of animal life, vegetation, or property.

(32) **Nutrient management plan (NMP) -** The Natural Resources Conservation Service Practice Standard 590 plan. A plan to address the amount, source, placement, form and timing of the application of all nutrients and soil amendments.

(33) **Nutrient utilization plan (NUP)** - A plan developed to evaluate and address site specific characteristics of a LMU to ensure that the beneficial use of manure, litter or wastewater is conducted in a manner to prevent nutrient impacts on water quality.

(34) **One-hundred-year, 24-hour rainfall event** - The maximum rainfall event with a probable recurrence interval of once in 100 years, with a duration of 24 hours, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall information developed therefrom.

(35) **One-hundred-year flood plain** - Any land area that would be inundated by the one-hundred-year, 24-hour rainfall event.

(36) **Open lot** - Pens or similar confinement areas with dirt, concrete, or other paved or hard surfaces wherein livestock or poultry are substantially or entirely exposed to the outside environment except for small portions of the total confinement area affording protection by windbreaks or small shed-type shade areas and that do not sustain crops, vegetation, forage growth, or post harvest residues in the normal growing season. For the purposes of this subchapter, the term open lot is synonymous with the terms dirt lot, or dry lot, for livestock or poultry, as these terms are commonly used in the agricultural industry.

(37) **Operator** - The owner or person responsible for the overall operation of a facility or part of a facility, subject to the provisions of this subchapter.

(38) **Permanent odor sources** - Those odor sources that may emit odors 24 hours per day. For the purposes of this subchapter, permanent odor sources include, but are not limited to, pens, confinement buildings, lagoons, retention control structures, manure stockpile areas, and solid separators. For the purposes

of this subchapter, permanent odor sources shall not include any feed handling facilities, land application equipment, or land management units.

(39) **Permittee** - Any person issued an individual permit or order or covered by a general permit.

(40) **Pesticide** - A substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest, or any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

(41) **Playa -** A flat-floored, clayey bottom of an undrained basin that is located in an arid or semi-arid part of the state, is naturally dry most of the year, and collects runoff from rain but is subject to rapid evaporation.

(42) **Process generated wastewater** - Any water directly or indirectly used in the operation of an AFO (such as spillage or overflow from animal or poultry watering systems which comes in contact with waste; washing, cleaning, or flushing pens, barns, manure pits; direct contact swimming, washing, or spray cooling of animals; and dust control), including water used in or resulting from the production of animals or poultry or direct products (e.g., milk, meat, or eggs).

(43) **Production area** - That part of an AFO that includes, but is not limited to, the animal confinement area, the manure storage area, the raw materials storage area, and the control facilities.

(44) **Protection zone -** The area within the watershed of a sole-source surface drinking water supply that is:

(A) within two miles of the normal pool elevation, as shown on a United States Geological Survey (USGS) 7 1/2-minute quadrangle topographic map, of a sole-source drinking water supply reservoir;

(B) within two miles of that part of a perennial stream that is:

(i) a tributary of a sole-source drinking water supply; and

(ii) within three linear miles upstream of the normal pool elevation, as shown on a USGS 7 1/2-minute quadrangle topographic map, of a sole-source drinking water supply reservoir; or

(C) within two miles of a sole-source surface drinking water supply river, extending three linear miles upstream from the sole-source water supply intake point.

(45) **Recharge feature** - Those natural or artificial features either on or beneath the ground surface at the site under evaluation that provide or create a significant pathway between the ground surface and the underlying groundwater within an aquifer. Significant artificial pathways include, but are not limited to, wells and excavation or material pits. Significant natural pathways include, but are not limited to: faults, fractures, sinkholes or other macro pores that allows direct surface infiltration, a permeable or a shallow soil material that overlies an aquifer, exposed geologic formations that are identified as an aquifer, or a water course bisecting an aquifer.

(46) **Retention control structure** (RCS) - Any basins, ponds, pits, tanks, conveyances, and lagoons used to store and/or treat manure, litter, water, and sludge. This does not include conveyance systems such as irrigation piping or ditches that are designed and maintained to convey but not store any manure, litter or water.

(47) Significant CAFO expansion – any CAFO that increases the waste production at the CAFO by more than 25% or which requires an increase in the capacity of the retention control structure or additional land management units.

(48) **Sludge** - Solid, semi-solid, or liquid waste generated during the treatment of and/or storage of any wastewater. The material resulting from treatment, coagulation, or sedimentation of waste in a RCS.

(49) **Sole-source surface drinking water supply** - A body of surface water that is identified as a public water supply in §307.10, Appendix A of Chapter 307 of this title (relating to Texas Surface Water Quality Standards) and is the sole source of supply of a public water supply system, exclusive of emergency water connections.

(50) **Technical Service Provider** - an individual, entity, or public agency certified and placed on an approved list by NRCS to provide technical services to program participants or the NRCS.

(51) **Twenty-five-year, 10-day rainfall event** - The maximum rainfall event with a probable recurrence interval of once in 25 years, with a duration of 10 days, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall information developed therefrom.

(52) **Twenty-five-year, 24-hour rainfall event** - The maximum rainfall event with a probable recurrence interval of once in 25 years, with a duration of 24 hours, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall information developed therefrom.

(53) **United States Department of Agriculture - Natural Resources Conservation Service** - An agency of the United States Department of Agriculture that provides assistance to agricultural producers for planning and installation of conservation practices through conservation and technical programs.

(54) **Waste** - Manure (feces and urine), litter, bedding, or feedwaste from animal feeding operations.

(55) **Wastewater** - Any water, including process generated wastewater and precipitation, that comes into contact with any manure, litter, bedding, or any raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g., milk, meat, or eggs).

(56) **Water in the state** - 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.

(57) **Well** - Any artificial excavation into and/or below the surface of the earth whether in use, unused, abandoned, capped, or plugged that may be further described as one or more of the following:

(A) an excavation designed to explore for, produce, capture, recharge, or recover water, any mineral, compound, gas, or oil from beneath the land surface;

(B) an excavation designed for the purpose of monitoring any of the physical or chemical properties of water, minerals, geology, or geothermal properties that exist or may exist below the land surface;

(C) an excavation designed to inject or place any liquid, solid, gas, vapor, or any combination of liquid, solid, gas, or vapor into any soil or geologic formation below the land surface; or

(D) an excavation designed to lower a water or liquid surface below the land surface either temporarily or permanently for any reason.

§321.33 Applicability and Required Authorizations.

(a) All CAFOs are point sources which require owners and operators to seek and obtain coverage under a general permit or individual permit. CAFO owners and operators have a duty to seek coverage as described in this section.

(b) Individual Permit Required. A discharge from the following CAFOs may be authorized only through an individual permit in accordance with §321.34 of this title (relating to Permit Application). Except as provided by subsections (e) or (f) of this section, any operator who is required to obtain an individual permit under this subsection may not commence physical construction and/or operation of any control facilities until an individual permit is issued for that CAFO, or unless otherwise authorized by the commission in accordance with Texas Water Code (TWC), §26.027(c)).

(1) Any CAFO located within one mile of Coastal Natural Resource Areas as defined by Texas Natural Resources Code, §33.203 unless the CAFO was authorized by the commission prior to January 10, 1997.

(2) Any dairy CAFO located in a major sole-source impairment zone.

(3) Any CAFO where, on the date the executive director determines that the application is administratively complete, any part of the production area of the CAFO is located or proposed to be located within the protection zone of a sole-source surface drinking water supply, as required by TWC, §26.0286.

(4) Any CAFO where any part of the production area or land management units is located in a watershed of a segment listed on the current EPA approved 303(d) list of impaired water bodies as required by 33 USC §1313(d) where a TMDL implementation plan has been adopted by the commission that established additional water quality protection measures for CAFOs which are not required by the CAFO general permit.

(5) Any AFO that the executive director designates and requires to be authorized by an individual permit to achieve the policies and purposes enumerated in the TWC, §5.120 and §26.003; the Texas Health and Safety Code, Chapters 341, 361, or 382; or §321.31 of this title (relating to Purpose and General Policy). Cases for which the executive director may require an AFO to obtain an individual permit include, but are not limited to, situations where:

(A) the operation is located near surface or groundwater resources;

(B) compliance with standards in addition to those listed in this subchapter is necessary in order to protect water in the state from pollution;

(C) the operation is not or has not been in compliance with the standards of this subchapter;

(D) the operation is under formal commission enforcement or has been referred to the commission for enforcement by the Texas State Soil and Water Conservation Board;

(E) the criteria established in §205.4 of this title (relating to Authorizations and Notices of Intent) apply; or

(F) other pertinent factors are determined by the executive director.

(c) Individual Permit or General Permit Required. A discharge from any other CAFO must be authorized either by an individual permit or an applicable general permit. Except as provided by either subsection (e) or (f) of this section, any operator required to obtain an individual permit or coverage under a general permit according to this subsection may not begin physical construction or operation of any control

facility until the CAFO operator receives an individual permit or authorization under a general permit, unless otherwise authorized by the commission under TWC, §26.027(c).

(d) New or expanding AFO. After [insert effective date of this subchapter], no person may commence construction or operation of a new AFO or alter any existing AFO such that it becomes a CAFO without prior authorization through an individual permit or a general permit, unless otherwise authorized by the commission under TWC, §26.027(c).

(e) Newly defined CAFO. An AFO that becomes defined as a CAFO after [insert effective date of this subchapter] may not begin physical construction or operation of any new control facility until the CAFO operator receives authorization through an individual permit or a general permit, unless otherwise authorized by the commission under TWC, §26.027(c)~~)~~.

(f) Dry litter poultry Operations. Existing dry litter poultry operation must file an application for an individual permit or a general permit in accordance with subsection (a) or (b) of this section not later than April 13, 2006.

(g) Facilities Operating Under an Existing Authorization. A CAFO currently authorized by ~~a~~ registration must apply for an individual permit before July 27, 2004 in order to continue to operate. If such an application is timely filed, operation of the CAFO under the terms and conditions of the existing registration will

continue to be authorized until final commission action on the permit application or until the CAFO qualifies for coverage under a general permit.

(h) Expansion or Modification Requirements. A CAFO operator authorized by an individual permit must comply with §305.62 of this title (relating to Amendment). Before the permittee begins physical construction or operation of any new control facility, the operator must obtain commission authorization. Major amendments include, but are not limited to:

(1) increasing the maximum number of animals authorized for confinement;

(2) increasing the wastewater storage volume; and

(3) adding land management units.

(i) AFOs That Are Not Defined or Designated As CAFOs. Discharges of manure, litter or wastewater from an AFO that is not a CAFO as defined in this subchapter are authorized under this rule. Requirements applicable to these AFOs are described in §321.47 of this title (relating to Requirements for AFOs Not Defined or Designated As CAFOs).

(j) Runoff From a LMU.

(1) The runoff of manure, litter, or wastewater to water in the state from a CAFO as the result of the proper land application of that manure, litter or wastewater to land management units under the operator's control is subject to the requirements of this subchapter in accordance with paragraph (2) of this subsection.

(2) Where manure, litter, or wastewater is applied in accordance with a site specific NMP that complies with §321.36(d) of this title (relating to TPDES General requirements for CAFOs) or when the land application conforms to §321.40 of this title (relating to CAFO Land Application Requirements), precipitation-related discharge of runoff from land management units under the control of a CAFO operator is authorized as:

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

(B) an agricultural storm water discharge for all other sources.

(k) Edwards Aquifer. New CAFOs are prohibited on the Edwards Aquifer recharge zone.

(l) Permit term. Individual and general permits granted under this subchapter shall be effective for a term not to exceed five years from the date the permit is issued. Any previously issued CAFO individual permit or authorization by rule that did not include an expiration date shall expire on [insert 180 days after the effective date of this rule]. The permittee shall comply with the requirements of subsection (g) of this section.

(m) Dual authorization. No person may concurrently hold both an individual permit and authorization under a general permit for the same CAFO.

(n) Additional Requirements. Authorization under this subchapter, a general permit or an individual permit does not release the operator from any responsibilities or requirements under other federal, state, or local statutes or regulations.

(o) State-only authorizations. Any AFO which is a state-only CAFO, as defined in §321.32 of this title (relating to Definitions) must be authorized in accordance with (a) or (b) of this section.

§321.34. Permit Applications.

(a) Any operator of an AFO who is required to operate under an individual permit by the Texas Water Code, the executive director, or this subchapter shall submit an application in accordance with Chapter 281 of this title and Chapter 305 of this title. The applicant shall provide such additional information in support of the application as may be necessary for the executive director to carry out an adequate administrative and technical review of the application.

(b) Applicants shall comply with §§305.41, 305.43, 305.44, and 305.47 of this title (relating to Applicability; Who Applies; Signatories to Applications; and Retention of Application Data) and §1.5(d) of this title (relating to Record of the Agency). Except as provided in subsection (c) of this section, §§305.61 - 305.68

of this title (relating to Applicability; Amendments; Renewal; Transfer of Permits; Permit Denial; Suspension and Revocation; Revocation and Suspension Upon Request or Consent; and Action and Notice on Petition for Revocation or Suspension) apply to applications for CAFO permits. Notice, public comment, and contested case hearing on applications shall be conducted in accordance with commission rules governing applicable individual permits applications.

(1) Any permittee with an issued and effective individual permit shall submit an application for renewal of the permit in accordance with the requirements of Chapter 281 and 305 of this title (relating to Applications Processing and Consolidated Permits), or shall submit a notice of intent (NOI) seeking coverage under a CAFO general permit in accordance with the requirements of the general permit.

(2) If an individual permit application or an NOI seeking coverage for a CAFO general permit has been submitted before the expiration date of the existing authorization, the terms and conditions of the existing permit continues in effect until final commission action on the permit application or until the CAFO qualifies for coverage under a general permit.

(3) A CAFO owner or operator who submits an NOI for a new operation or significant expansion of its operation for a general permit must comply with the public participation process stipulated in the general permit.

(4) The executive director may renew an application for an individual permit for a state-only CAFO without public notice or opportunity for public comment, public meeting, or contested case hearing if it does not propose any change which constitutes a major amendment as defined in Chapter 305 of this title (relating to Consolidated Permits) or if it is not a major source as defined under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification). Renewal under this paragraph shall be allowed only if there has been no related formal enforcement action against the facility during the last 36 months of the term of the permit in which the commission has determined that:

(A) a violation occurred that contributed to pollution of surface or groundwater, or an unauthorized discharge has occurred, or a violation of §101.4 of this title (relating to Nuisance) has occurred or any violation of an applicable state or federal air quality control requirement has occurred; and

(B) such discharge or air emission violation was within the reasonable control of the permittee; and

(C) such discharge or air emission violation could have been reasonably foreseen by the permittee.

(5) For any application for renewal within an area specified in the definition of Dairy Outreach Program Areas in §321.32 of this title (relating to Definitions), an annual compliance inspection shall have been completed within 12 months of the date the executive director declares the application administratively complete.

(c) An operator shall submit a complete application within 90 days of notification from the executive director of designation that an individual permit is required under §321.33(b)(5) of this title (relating to Applicability and Required Authorizations).

(d) A permittee may amend their permit in accordance with §305.62 of this title and §321.33(h) of this title (relating to Applicability and Required Authorizations), and must include all requested changes to the permit. The executive director will process a permit amendment application in accordance with all applicable requirements in Chapter 281 of this title (relating to Applications Processing).

(e) Any operator of an AFO who files an application for an individual permit under this subchapter, or an amendment in accordance with§321.33(h) of this title (relating to Applicability and Required Authorizations), shall submit a complete application to the executive director, according to the provisions of this section including any other information as the executive director or the commission may require.

(f) Applications for an individual permit under this section shall be made on forms prescribed by the executive director. The applicant shall submit an original completed application with attachments to the executive director at the headquarters in Austin, Texas, and one additional copy of the application with attachments to the appropriate commission regional office. At a minimum, the executive director will require the following information to be submitted, as it is applicable to the operation or facility:

(1) information specified in §305.45 of this title (relating to Contents of Application for Permit);

(2) information specified in 40 Code of Federal Regulations (CFR) §122.21(i)(1) relating to application for a permit for a CAFO.

(3) a recharge feature certification, signed and sealed by a licensed professional engineer, or licensed professional geoscientist, documenting the absence or presence of any natural or artificial recharge features identified on any tracts of land owned, operated, controlled, rented or leased by the applicant and to be used as a part of a CAFO or land management unit. Documentation, by the certifying party, shall identify:

(A) the sources and methods used to identify the presence or absence of recharge features; and

(B) the method or approach to be used to identify previously unidentified and/or undocumented recharge features that may be discovered during the time of construction;

(4) In preparing the recharge feature certification, the licensed professional engineer or professional geoscientist must conduct an on-site inspection and must review all pertinent records and maps maintained by the following entities or persons to locate any artificial recharge feature:

(A) Railroad Commission of Texas;

(B) a Groundwater Conservation District, if applicable;

(C) Texas Water Development Board;

(D) the commission;

(E) Natural Resource Conservation Service (NRCS) and;

(F) previous owner of site, if available.

(5) where the applicant documents the presence of recharge features on the tracts for which an application is being filed, the applicant will submit a plan, signed and sealed by a, licensed professional engineer, or licensed professional geoscientist, that will prevent impacts to an aquifer from any located recharge features. The plan must include at least one of the following:

(A) installation of the necessary and appropriate protective measures for each located recharge feature such as impervious cover, berms, buffer zones, or other equivalent protective measures covering the production area and land management units; or

(B) except as specified in §321.41 of this title (relating to Special Requirements for Discharges to a Playa), submission of a detailed groundwater monitoring plan covering all affected facilities and land application areas. At a minimum, the groundwater monitoring plan shall specify procedures to annually

collect a groundwater sample from representative wells, have each sample analyzed for chlorides, nitrates, and total dissolved solids, and compare those values with background values for each well; or

(C) any other similar method or approach demonstrated by the applicant to be protective of any associated recharge feature and is approved by the commission; and

(6) any information required by §321.43 of this title (relating to Air Standard Permit for Animal Feeding Operations) to document compliance with the air standard permit;

§321.35. Fees.

(a) Application Fee. Each applicant for an individual permit shall pay an application fee as required by §305.53 of this title (relating to Application Fees).

(b) Annual Assessment Fees. Each permittee shall pay a consolidated annual fee as required by Chapter 21 of this title (relating to Water Quality Fees).

§321.36. TPDES General Requirements for CAFOs

(a) Applicability. These requirements apply to a general permit, individual permit or other authorization issued by the commission for a Large concentrated animal feeding operation (CAFO), Medium

CAFO, and Small CAFO subject to the requirements of Texas Pollutant Discharge Elimination System (TPDES).

(b) Permits. A CAFO ~~authorized under this subchapter~~ shall comply with §305.125 of this title (relating to Standard Permit Conditions) and all applicable permit conditions contained in agency rules. Requirements to provide for and assure compliance with standards set by the rules of the commission and the laws of Texas shall be determined and included in an individual 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) Control Facility. A CAFO must assure that the control facility is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from the design rainfall event as defined in §321.37 of this title (Effluent Limitations for Discharges from CAFO Production Areas).

(d) Nutrient Management Plan.

(1) On or before December 31, 2006, the operator of a CAFO must develop and implement a certified nutrient management plan (NMP) in accordance with the NRCS 590 Practice Standard. The plan shall include site-specific nutrient management practices that ensure appropriate agricultural utilization of nutrients in the manure, litter, or wastewater.

(2) The CAFO operator must create, maintain for five years, and make available to the executive director, upon request, a copy of the NMP and documentation of the implementation.

(3) A copy of the site-specific NMP must be maintained on site and made available to the executive director upon request.

(4) Compliance with the requirements of this section and applicable requirements for the design and operation of a control facility, as described in §§321.38 - 321.39 of this title (relating to Control Facility Design Requirements Applicable to AFOs and Control Facility Operational Requirements Applicable to AFOs) constitute compliance with the provisions of 40 CFR §122.42(e)(1)(i) - (ix).

(e) Manure, Litter and Wastewater Management.

(1) At least one representative sample of wastewater and one representative sample of manure/litter must be taken and analyzed each year for total nitrogen, total phosphorus, and total potassium. The results of these analyses shall be used in determining application rates for manure in conjunction with analysis of process wastewater.

(2) If manure, litter, or wastewater is sold or given to other persons for off-site land application or disposal, the CAFO operator must maintain a log of:

(A) date of removal from the CAFO;

(B) name of hauler;

(C) name and address of recipient; and

(D) amount, in wet tons, dry tons, or cubic yards of manure, litter, or wastewater.

(3) A single pick-up truck load need not be recorded.

(4) The operator must make the most recent nutrient analysis available to any hauler or recipient of manure, litter, or wastewater.

(f) Buffers for Land Management Units

(1) A sinkhole shall be protected with a 100-foot buffer from manure, litter, 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.

(g) Soil Sampling and Testing.

(1) Initial Sampling. Before commencing wastewater irrigation or manure/litter application on land owned, operated, or controlled by the CAFO operator, the operator shall collect and analyze at least one representative soil sample from each of the land management units according to the following procedures. For LMUs that have not received manure, litter and/or wastewater within the previous year, initial sampling must be completed before re-starting land application to the LMU.

(2) Annual Sampling. The CAFO operator shall annually collect soil samples for each LMUs where manure, litter or wastewater was applied during the preceding year.

(3) 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 procedures described in the agency's publication "Soil Sampling for Nutrient Utilization Plans (RG-408)."

(B) Samples shall be collected by the operator or its designee and analyzed by a soil testing laboratory within the same 45-day time frame each year, except when crop rotations or inclement weather require a change in the sampling time frame.

(C) Obtain one composite sample 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: 0 - 6 inches (for a LMU where the manure is incorporated directly into the soil) or 0 - 2 inches (for a LMU where the manure is not incorporated into the soil). Wastewater is considered to be incorporated. If a 0 - 2 inch sample is required under this subsection, then an additional sample from the 2 - 6 inch soil depth zone shall be obtained in accordance with the provisions of this section.

(ii) Zone 2: 6 - 24 inches.

(4) Laboratory Analysis. The CAFO operator shall have laboratory analysis of the soil samples performed for physical and chemical parameters to include: nitrate as nitrogen, extractable phosphorus (using - Mehlich III) potassium (extractable, ppm); sodium (extractable, ppm); magnesium (extractable, ppm); calcium (extractable, ppm); soluble salts/electrical conductivity (dS/m) - determined from extract of 2:1 (v/v) water/soil mixture; and soil water pH.

(h) Required Inspections. The CAFO operator shall perform the routine inspections described in paragraphs (1) and (2) of this subsection to determine preventative 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 must conduct a daily inspection of all water lines, including drinking water and cooling water lines, located within the drainage area of the RCS.

(2) A weekly inspection must be conducted of all control facilities and equipment used for land application of manure, litter or wastewater. An inspection must be made of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to each RCS. The inspection will note the level of liquid in each RCS as indicated by the depth marker required by subsection (k) ~~(l)~~ of this section.

(i) Recordkeeping

(1) A report shall be drafted and maintained for five (5) years in the PPP to document the inspections and to report that appropriate action has been taken in response to deficiencies identified during any inspection required by subsection (h) of this section. A CAFO operator shall correct all the deficiencies within 30 days or shall document the factors preventing immediate correction.

(2) Records must be maintained describing mortality management practices implemented in accordance with subsection (l) of this section.

(3) Documentation must be maintained 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;

(4) Documentation must be maintained describing a 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 a RCS discharge; and

(5) The operator of each CAFO must comply with the land application area recordkeeping requirements identified in 40 CFR §412.37 and §412.47. Compliance with §321.46 of this title (relating to Pollution Prevention Plan, Site Evaluation, and Recordkeeping) constitutes compliance with this requirement.

(j) Annual Report Required. An annual report must be submitted to the executive director's Office of Compliance and Enforcement, Enforcement Division and the appropriate regional office by February 15 (for the reporting period of January 1 to December 31 of the previous year) of each year from each CAFO authorized under a CAFO general permit or through an individual CAFO permit pursuant to this subchapter. The report shall be on forms prescribed by the executive director to include, but not limited to:

(1) number and type of animals, whether in open confinement or housed under roof;

(2) estimated total manure, litter, and wastewater generated during the last 12 months;

(3) total manure, litter, and wastewater land applied during the last 12 months on-site;

(4) total manure, litter, and wastewater transferred to other persons during the last 12 months;

(5) total number of acres for land application under the control of the CAFO operator, including both the acres covered under the NMP for the CAFO and total number of acres used in the past 12 months for land application;

(6) summary of discharges of manure, litter or wastewater from the production area that occurred during the last 12 months including dates, times, and approximate volume;

(7) a statement indicating that the NMP under which the CAFO is operating was developed and approved by a certified nutrient management specialist;

(8) a copy of the original soil analysis ~~report~~ for each LMU, regardless of whether manure, litter or wastewater has been applied;

(9) soil testing laboratory analysis and soil monitoring reports of all soil samples taken in accordance with the requirements of this subchapter;

(10) groundwater monitoring reports; and

(11) any other information requested by the executive director.

(k) Depth Marker. A permanent depth marker that identifies the level of the design rainfall event shall be installed and maintained in the RCS. The marker shall be visible from the top of the levee.

(l) Carcass Disposal. Carcasses shall be collected within 24 hours of death and properly disposed of within three days of death in accordance with the Texas Water Code Chapter 26; Texas Health and Safety Code, Chapter 361; and Chapter 335 of this title unless otherwise provided for by the commission. Animals must not be disposed of in any liquid manure or process wastewater system. Disposal of diseased animals shall also be conducted in a manner that prevents a public health hazard in accordance with Texas Agriculture Code, §161.004 and 4 TAC §31.3 and §58.31(b).

(m) Closure Required. A closure plan must be developed by a CAFO operator when a RCS will no longer be used and when the CAFO ceases or plans to cease operation. For closure of a CAFO, a closure plan must be developed and submitted to the executive director when operation of the CAFO or an individual treatment unit terminates. The closure plan must be developed using standards contained in the Texas Cooperative Extension / NRCS technical guidance publication #B-6122 (Closure of Lagoons and Earthen Manure Storage Structures). A CAFO shall maintain or renew its existing authorization and maintain compliance with the requirements of this subchapter until the facility has been closed.

§321.37. Effluent Limitations for Discharges from ~~CAFO~~ Production Areas.

(a) The following requirements will be applied in a permit or authorization issued by the commission, as applicable to animal feeding operations.

(b) The effluent limitations promulgated by the U.S. Environmental Protection Agency applicable to duck CAFOs, including 40 CFR §412.20 - §412.26, are adopted by reference. ~~:~~

(c) Except as provided by this section, there shall be no discharge of manure, litter, or wastewater from a poultry (chickens and turkeys), swine, or veal calf CAFO production area that is subject to the new source performance standards in 40 Code of Federal Regulations (CFR) §412.46. A poultry (chickens and turkeys), swine, or veal calf CAFO subject to the new source performance standards in 40 CFR §412.46 must design, construct, operate and maintain retention control structures to contain all wastewater including the runoff and direct precipitation from the 100-year, 24-hour rainfall event for the location of the facility as required by the federal effluent guidelines.

(d) Except as provided by this section, for all other CAFOs, there shall be no discharge of manure, litter, or wastewater from a CAFO production area. The operator of the CAFO must design, construct, operate and maintain retention control structures to contain all wastewater including the runoff and direct precipitation from the 25-year, 24-hour rainfall event for the location of the facility.

(e) A discharge that is the result of a chronic or catastrophic rainfall event, or the result of catastrophic conditions, is allowable from a RCS that has been properly designed, constructed, operated, and maintained.

(f) Voluntary alternative performance standards may be established in an individual permit for a cattle (other than veal calves) or dairy CAFO, when requested by a permit applicant. These standards may be established as effluent limitations in lieu of the requirements of subsection (d) of this section, so long as they are not in conflict with other requirements of this subchapter or other requirements of the commission. Voluntary alternative performance standards must be consistent with the requirements of 40 CFR §412.31(a)(2).

(g) Voluntary superior environmental performance standards may be established in an individual permit for a swine, poultry (chickens and turkeys), or veal calf CAFO, when requested by a permit applicant. These standards may be established as effluent limitations in lieu of the requirements of subsection (c) of this section, so long as they are not in conflict with other requirements of this subchapter or other requirements of the commission. Voluntary superior environmental performance standards must be consistent with the requirements of 40 CFR §412.46(d).

§321.38. Control Facility Design Requirements Applicable to CAFOs.

(a) Purpose. The purpose of this section is to describe the control facility design requirements that apply to CAFO permits or other authorizations allowed by this subchapter.

(b) Well Buffers. Except as provided by subsection (c) of this section, the control facility of an AFO must 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 exclusively for private water supply - 150 feet; or

(3) Water wells used exclusively for agriculture irrigation - 100 feet.

(c) A CAFO operating under an existing authorization may continue the operation and use of any existing holding pens and retention control structures located within the required well buffer zones provided they are in accordance with the executive director's approved recharge feature evaluation and certification required under subsection (g) of this section. Documentation supporting variances of the buffer zones which were previously authorized must be kept on-site and made available to TCEQ personnel upon request.

(d) 100 year Flood Plain. All control facilities, including holding pens and retention control structures, must be located outside of the100-year flood plain, as defined in Chapter 301 of this title (relating to Levee Improvement Districts, District Plans of Reclamation, and Levees and Other Improvements), unless the facility is protected from inundation and damage from a 100-year, 24-hour rainfall event.

(e) RCS Design. The following design requirements apply to any AFO, including any CAFO.

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

(2) Any AFO 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 NRCS, American Society of Agricultural Engineers, American Society of Civil Engineers or American Society of Testing Materials that are in effect at the time of construction. Where site-specific variations are warranted, a licensed Texas professional engineer must document these variations and their appropriateness to the design.

(4) Any existing RCS that has been properly maintained and shows no sign of structural problems or leakage is considered to be properly designed and constructed, 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 professional engineer as providing equivalent protection as the requirements of this section.

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

(A) the site-specific conditions are the same as those used by the NRCS to develop the plan (numbers of animals, runoff area, wastes 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.

(7) The design plan must include documentation of the sources of information, assumptions and calculations used in determining the appropriate volume capacity of the retention control structures. The volume must include design rainfall event runoff and normal operating capacity requirements in accordance with subparagraphs (A) and (B) of this paragraph or design rainfall event runoff and evaporation systems in accordance with subparagraphs (A) and (C) of this paragraph.

(A) Design Rainfall Event Runoff.

(i) 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

CFR §412.46 must have a RCS designed and constructed to meet or exceed the capacity required to contain the runoff and direct precipitation from the 100-year, 24-hour rainfall event.

(ii) All other AFOs. All other AFOs shall have a 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 unless additional storage is required by the executive director.

(B) Design Capacity Requirements for Systems Using Irrigation.

(i) The volume capacity of the RCS shall be designed for the authorized number of animals to meet the demands of a hydrologic needs analysis (water balance) that demonstrates the irrigation water requirements for the cropping system maintained on the LMU(s).

(ii) Precipitation inputs to the water balance shall be the average monthly precipitation taken from 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 required storage volume in subparagraph (A).

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

(vi) Any other relevant volume needed in the water balance, including the air standard permit requirements.

(C) 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 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 rainfall event as required by subparagraph (A) of this paragraph 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 retention control structures on a regular schedule.

(g) RCS Embankment and Liner Design. A permit or authorization will identify required design specifications for all new construction and for all structural modifications of RCS embankments.

(1) The design specifications must describe standards for the quality of soils used, lift thickness and density at optimum moisture content, procedures and minimum requirements for liner and embankment compaction testing, and spillway construction.

(2) Each RCS must have a minimum of two vertical feet of materials equivalent to those used at the time of design and construction between the top of the embankment and the structure's spillway. Retention control structures without spillways must have a minimum of two vertical feet between the top of the embankment and the required storage capacity, including any the additional storage required by an alternative standard.

(3) The operator shall ensure site-specific documentation is prepared that shows that no significant hydrologic connection exists between the contained wastewater and water in the state. Where the operator cannot document that no significant hydrologic connection exists, retention control structures must have a liner consistent with the requirements of this paragraph.

(A) Documentation must show 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 professional engineer or licensed

professional geoscientist and must include information on the hydraulic conductivity tested at the optimum moisture content and thickness of the natural materials underlying and forming the walls of the containment structure up to the wetted perimeter.

(B) If no significant leakage would result from the use of in-situ materials is claimed, documentation that leakage will not migrate to waters in the state 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 a NRCS engineer, or a licensed professional engineer or a licensed professional geoscientist that a liner is not needed to prevent a significant hydrologic connection between the contained wastewater and waters in the state will be considered documentation that no significant hydrologic connection exists.

(C) A permit or authorization will allow the consideration of site-specific conditions in the design and construction of liners. However, the permit or authorization will identify that where no site specific assessment has been done by a licensed professional engineer or licensed professional geoscientist, the liner shall be constructed and documented to have hydraulic conductivities no greater than 1×10^{-7} cm/sec, with a thickness of 1.5 feet or greater or its equivalency in other materials. Where a liner is installed to prevent hydrologic connection, the permit shall require the operator to maintain the liner to inhibit infiltration of wastewaters.

(D) 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.

(E) Documentation of lack of hydrologic connection, liner and capacity certifications by a licensed professional engineer or licensed 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.

§321.39. Control Facility Operational Requirements Applicable to CAFOs.

(a) Purpose. The purpose of this section is to describe the control facility operational requirements that apply to CAFO permits or other authorizations allowed by this subchapter.

(b) RCS Operation and Maintenance. A CAFO a RCS for storage and treatment of storm water, sludge, or process generated wastewater, including liquid manure handling systems, shall ensure that the required capacity in the RCS is available to contain rainfall and rainfall runoff from the required rainfall event.

(1) The operator shall restore such capacity after each rainfall event or accumulation of manure, sludge, or process generated wastewater that reduces such capacity, when conditions are favorable for irrigation. Favorable conditions shall be when the soil moisture level decreases so that irrigation will not cause runoff.

(2) The normal operating wastewater level in the RCS shall be maintained within the design of the RCS. If the water level in the RCS encroaches into the storage volume reserved for the design rainfall event (25-year or 100-year) the operator must document the conditions that resulted in this occurrence. As soon as irrigation is not prohibited, the CAFO operator shall irrigate until the water level is at or below the planned operating level expected during that month.

(3) If a RCS is in danger of imminent overflow, then the CAFO operator shall take reasonable steps to irrigate wastewater to land management units only to the extent necessary to prevent overflow from the RCS. If irrigation results in a discharge from a LMU, the CAFO operator shall collect samples from the RCS for the parameters identified in §321.44(b)(1) of this title (relating to CAFO Notification Requirements) . The operator shall orally notify the appropriate regional office within 24 hours of beginning irrigation under this provision and in writing within 14 working days.

(4) A rain gauge capable of measuring the required rainfall event shall be installed and properly maintained.

(5) The CAFO operator shall insure liners and embankments are protected from animals by fences or other protective devices. No tree shall be allowed to grow such that the root zone would intrude or compromise the structure of the liner.

(c) Sludge. The CAFO operator shall regularly monitor sludge accumulation and depth in a RCS, as necessary based upon the design sludge storage volume in the RCS.

(1) Sludge shall be removed from retention control structures in accordance with the design schedule for cleanout to prevent the accumulation of sludge from exceeding the designed sludge volume of the structure.

(2) The operator shall provide written notice to the appropriate regional office of the commission as soon as the RCS cleaning is scheduled, but not less than ten days before cleaning. The operator shall also provide written verification of completion to the same regional office within five days after the cleaning has been completed. Removal of sludge shall be conducted during favorable wind conditions that carry odors away from nearby receptors. Any increase in odors associated with a properly managed cleanout under this subsection will be taken into consideration by the executive director when determining compliance with the provisions of this subchapter.

(d) Spill Prevention and Recovery. The CAFO operator shall develop written procedures for spill prevention and recovery for all toxic pollutants, including pesticides and herbicides, used at a CAFO. The operator shall prevent the discharge of pesticide and herbicide contaminated water into surface water in the state. There shall be no disposal of herbicides, pesticides, solvents or heavy metals, or of spills or residues from storage or application equipment or containers, into retention control structures.

(e) Storage of Waste. A permit or authorization will establish requirements for the temporary storage of manure, litter, or sludge not to exceed 30 days, and requirements for permanent storage for more than 30 days.

(f) Composting. Composting on-site at a CAFO shall be performed in accordance with Chapter 332 of this title (relating to Composting). CAFOs may compost waste generated on-site, including manures, litters, bedding, feed, and dead animals. Pursuant to Chapter 332 of this title (relating to Composting), a CAFO operator may add agricultural products to provide an additional carbon source or bulking agent to aid in the composting process. If the compost 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 compost areas must be located within the drainage of the RCS and must be shown on the site plan and accounted for in the design calculations of the RCS.

(g) Maintenance of animals.

(1) Animals confined at the CAFO shall be restricted from coming into direct contact with surface water in the state through the use of fences or other controls.

(2) A CAFO that maintains animals in pastures must maintain crops, vegetation, forage growth, or postharvest residues in the normal growing season, excluding the feed and water trough areas and open lots designated on the site map.

§321.40. CAFO Land Application Requirements.

(a) The purpose of this section is to describe the land application requirements that apply to CAFO permits or other authorizations allowed by this subchapter.

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

(c) Manure, litter, 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, litter, or wastewater from the application site 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).

(g) The CAFO operator shall not locate a new LMU within the required well buffer zones identified in §321.38(b). 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 professional engineer or licensed professional geoscientist provides accurate documentation showing that ~~unless~~ additional wellhead protective measures will be 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 no less than 100 feet of vegetation to be maintained between waste or wastewater application areas and surface water and watercourses. The AFO operator shall maintain the buffer strips in accordance with NRCS guidelines.

(i) AFOs introducing wastewater or chemicals to water wellheads for the purpose of irrigation shall install backflow prevention devices.

(j) Nighttime application of manure, litter, or wastewater by a CAFO shall be allowed only in areas with no occupied residence(s) within 0.25 mile from the outer boundary of the actual area receiving waste application. In areas with an occupied residence within 0.25 mile from the outer boundary of the actual area receiving waste application, application shall only be allowed from one hour after sunrise until one hour before sunset, unless the current occupants of such residences have, in writing, agreed to such nighttime applications. -

(k) Any CAFO operator who owns, operates, controls, rents, or leases land where manure, litter or wastewater from the CAFO is land applied must be in compliance with the deadline and requirements specified in §321.36(d) of this title (relating to Nutrient Management Plan). Before this deadline, the operator of any existing CAFO, and the operator of an AFO not subject to the deadline and requirements of a NMP who does not have a NMP, must manage nutrients on land management units according to all other land application requirements of this subchapter.

(1) Any land application of manure, litter and wastewater shall not exceed the planned crop requirements. Land application rates of manure, litter and wastewater shall be based on the total nutrient concentration on a dry weight basis. A permit or other authorization will establish the appropriate limits for phosphorus and the requirements to develop the nutrient utilization plan (NUP).

(2) NUP. A certified NRCS NMP (Practice Standard 590) developed and certified by an employee of the NRCS, a nutrient management specialist certified by the NRCS, the Texas State Soil and Water Conservation Board, Texas Cooperative Extension, an agronomist or soil scientist on full-time staff at an

accredited university located in the State of Texas, or a professional agronomist or soil scientist certified by the American Registry of Certified Professionals in Agronomy, Crops and Soils (ARCPACS), 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. When a NMP is implemented, the NMP will supercede the requirements of a NUP.

(3) For a CAFO, 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.

§321.41. Special Requirements for Discharges to a Playa.

(a) This section applies any AFO operator authorized by the commission before July 13, 1995 to discharge manure, litter or wastewater into a playa or to use a playa as a RCS for manure, litter or wastewater in accordance with Texas Water Code, §26.048.

(b) A playa that is in use as a RCS, as allowed by Texas Water Code, §26.048, and that show no signs of leakage, is considered to satisfy all applicable design and construction requirements specified in §321.38 of this title (relating to Control Facility Design Requirements Applicable to CAFOs.

(c) A groundwater monitoring plan for use of a playa shall be implemented in accordance with Texas Water Code, §26.048.

(d) If the executive director determines that contamination of groundwater is occurring as a result of use of the playa as a retention facility for manure, litter or wastewater from the AFO, the executive director shall require action to correct the problem or revoke the AFO's authority to discharge into the playa.

§321.42. Requirements Applicable to the Major Sole Source Impairment Zone.

(a) The purpose of this section is to describe certain requirements that must be applied in CAFO permits or other authorizations allowed by this subchapter when an operation is located in a major sole source impairment zone. Additionally, subsection (i) of this section applies to any dairy AFO, including any dairy CAFO, which is located in a major sole-source impairment zone.

(b) The dairy operator must adhere to provisions of this section and the other requirements contained in this subchapter. When a requirement of this section conflicts with another requirement of this subchapter, the requirement of this section shall supercede the other requirement.

(c) The dairy CAFO operator must operate and maintain a margin of safety in the RCS to contain the volume:

(1) of runoff and direct precipitation from the 25-year, 10-day rainfall event; or

(2) necessary to prevent overflow resulting from a statistically determined probability of overflow resulting in a discharge frequency of no more than once in the past 25 years. The margin of safety using this method must be evaluated using the Soil Plant Air and Water (SPAW) Field and Pond Hydrology Tool and certified by a Texas licensed profession engineer.

(d) The dairy is only authorized to discharge from a properly operated and maintained RCS when the volume of the rainfall runoff and direct precipitation exceed the volume for the margin of safety that must be maintained above the designed normal operating level as described in the RCS management plan.

(e) If construction of new or modified retention control structures is necessary to comply with subsections (c) and (d), a permit or other authorization will specify a schedule for compliance.

(f) The dairy operator shall install and maintain a permanent marker (measuring device) in the retention control structure visible from the top of the levee to show the following:

(1) the volume for the margin of safety; and

(2) one-foot increments beginning from the pre-determined minimum treatment volume of the RCS to the top of the embankment or spillway.

(g) The dairy operator shall implement an RCS Management Plan incorporating the margin of safety developed by a Texas licensed professional engineer. The management plan shall become a component of the pollution prevention plan (PPP), shall be developed for the RCS system, and must describe or include:

(1) RCS management controls appropriate for the CAFO and the methods and procedures for implementing such controls;

(2) the methods and procedures for proper operations and maintenance of the RCS consistent with the system design;

(3) the appropriateness and priorities of any controls, reflecting the identified sources of pollutants at the facility;

(4) a stage/storage table for each retention control structure with minimum depth increments of one-foot, including the storage volume provided at each depth;

(5) a second table or sketch that includes water level ranges containing incremental component volumes of total design storage, including the storage volume provided at each specified depth (or water level) range and the type of storage designated by that depth range; and

(6) the planned end of month storage volume anticipated for each retention control structure for each month of the year and must specify the corresponding operating depth expected at the end of each month of the year, based on the design assumptions.

(h) The dairy operator must monitor and record wastewater levels daily in the RCS. A log must be kept in the PPP to document the level of wastewater observed each day. In circumstances where the RCS has a water level exceeding the expected end of the month depth, the operator shall document in the PPP why the level of water in the structure is not at or below the expected depth.

(i) The dairy operator shall provide for management and disposal of waste as specified in TWC, §26.503 in accordance with the following:

(1) beneficially used outside of the watershed;

(2) disposed in landfills outside of the watershed, subject to the requirements of commission rules relating to industrial solid waste;

(3) delivered to a composting facility approved by the executive director;

(4) put to another beneficial use approved by the executive director; or

(5) applied in any of the following ways:

(A) in accordance with the requirements of §321.40 of this title (relating to CAFO Land Application Requirements) to a waste application field owned or controlled by the owner of the CAFO, if the field is not a historical waste application field, as defined in §321.32 of this title;

(B) in accordance with the requirements of §321.40(k)(1) of this title, to a historical waste application field that is owned or operated by the owner or operator of the CAFO, if results of representative composite soil sampling conducted at the waste application field and submitted to the executive director show that the waste application field contains 200 or fewer parts per million (ppm) of extractable phosphorus (reported as P) in the Zone 1 (0 - 6 inch) depth; or

(C) in accordance with a detailed nutrient utilization plan approved by the executive director which, at a minimum, meets the requirements of §321.40(k)(2), to a historical waste application field that is owned or operated by the owner or operator of the CAFO, if results of representative composite soil sampling conducted at the waste application field and submitted to the executive director show that the waste application field contains greater than 200 ppm of extractable phosphorus (reported as P) in the Zone 1 (0 - 6 inch) depth.

(j) The dairy operator must contract with an employee of the NRCS, a certified nutrient management specialist, the Texas State Soil and Water Conservation Board, the Texas Cooperative Extension, or an

agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas to collect one or more representative composite soil sample from each land management unit, not less than once every 12 months.

(k) The dairy operator shall notify the appropriate regional office in writing or by electronic mail with the date, time and location at least 10 working days before collecting soil samples.

(l) The dairy operator shall assure that soil samples are analyzed in accordance with the procedures and laboratory analysis requirements in §321.36(g).

(m) The dairy operator shall inspect the irrigation system to prevent discharges. If an unauthorized discharge from an irrigation system within the major sole source impairment zone is documented as a violation, then the AFO operator shall, if required by the executive director, install an automatic emergency shut-down or alarm system to notify the operator of system problems.

(n) The dairy operators are prohibited from land application of manure, litter or wastewater in a major sole source impairment zone between midnight and 4 a.m.

(o) Comprehensive Nutrient Management Plan (CNMP) All dairy CAFOs in the major sole source impairment zone must develop and operate under a CNMP certified by the Texas State Soil and Water Conservation Board. This CNMP must be implemented not later than December 31, 2006.

(p) Discharge notification for CAFOs in a major sole source impairment zone. In addition to the requirements of §321.44 of this title (relating to Notification Requirements), a CAFO operator in a major sole source impairment zone must comply with this subsection. In the event of a discharge from the RCS or LMU during a chronic or catastrophic rainfall event or resulting from catastrophic conditions, the CAFO operator shall orally notify the appropriate regional office within one hour of the discovery of the discharge. The operator shall send written notification to the appropriate regional office within 14 working days.

(q) Any dairy CAFO operator to which this section applies that has an unauthorized discharge from the RCS which used the SPAW certification method for the margin of safety must within 90 days of written notification by the executive director develop and implement the capacity for a 25-year, 10-day margin of safety. A variance from 90-days may be granted by the executive director upon written request.

(r) Any dairy CAFO operator to which this section applies shall in the event of a chronic rainfall discharge from an RCS or land management unit must submit a report to the regional office showing the facility records that substantiate the overflow was beyond control of the operator. After review of the report, if required by the executive director, the operator shall have an engineering evaluation by a Texas licensed professional engineer developed and submitted to the executive director. This requirement is in addition to the discharge notification requirement in this subchapter.

§321.43. Air Standard Permit for Animal Feeding Operations (AFOs).

(a) Air quality authorization required. All animal feeding operations (AFOs), regardless of size, are required to obtain air quality authorization under the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, Subchapter C. AFOs may obtain air quality authorization in one of the following ways:

(1) by meeting the requirements of a permit-by-rule under Chapter106, Subchapter F of this title (relating to Animal Confinement);

(2) by obtaining an individual permit under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification); or

(3) by meeting the requirements in this section and the general conditions for air standard permits in §116.615 of this title (relating to General Conditions) .

(b) Applicability. The air standard permit requirements in this section and in §116.615 of this title are applicable to all portions of animal feeding operations including permanent odor sources, land management units, and associated operations. The air standard permit requirements are also applicable to associated feed handling or feed milling operations (including but not limited to natural gas fired boilers, milling equipment, and grain cleaners) located on the same site. This air standard permit may not be used to authorize the construction or operation of unassociated operations or equipment, including incinerators or emergency generators, located at the AFO.

(c) Water quality authorization. Authorization under this air standard permit may be obtained by AFOs with water quality authorization under:

(1) a Texas Pollutant Discharge Elimination System (TPDES) general permit;

(2) a water quality general permit; or

(3) an individual water quality permit.

(d) Air standard permit in lieu of individual permit. A CAFO or other AFO that obtains water quality authorization as provided in subsection (c) and also satisfies the air quality requirements contained in this section qualifies for an air standard permit authorization in lieu of an individual air quality permit under Chapter 116 of this title .

(e) Obtaining the AFO air standard permit. The air standard permit authorization may be obtained in conjunction with a water quality application for an individual or general permit. If no water quality application is pending, a separate request for authorization under the AFO air standard permit may be submitted in writing that must indicate that the AFO will comply with all the requirements in this section.

(f) Fee. There is no fee for the AFO air standard permit.

(g) Facilities not eligible. A CAFO or other AFO does not qualify for authorization under the air standard permit if:

(1) The CAFO or other AFO has not obtained water quality authorization; or,

(2) The CAFO or other AFO constitutes a new major source or is located at a site that constitutes a major source as defined by Chapter 116 of this title.

(h) Dual authorization. No person may concurrently hold both an individual permit under Chapter 116 and authorization under this air standard permit for the same AFO and associated facilities. This does not preclude the operator from holding individual permits for facilities not authorized by this air standard permit.

(i) Restriction on use of permit-by-rule. An AFO authorized under this air standard permit may not claim authorization under §106.532 of this title (relating to Water and Wastewater Treatment) to construct a new RCS.

(j) Requirements for air standard permit coverage. Animal feeding operations (AFOs) must meet the following requirements:

(1) Air emission limitations.

(A) Facilities shall be operated in such a manner as to prevent the creation of a nuisance as defined by Texas Health and Safety Code §341.011 and §321.32(32) of this title (relating to Definitions), and as prohibited by §101.4 of this title (relating to Nuisance). Facilities shall be operated in such a manner as to prevent ~~or~~ a condition of air pollution as defined by Texas Health and Safety Code, §382.003(3).

(B) The AFO operator shall take necessary action to identify any nuisance condition that occurs. The AFO operator shall take action to abate any nuisance condition as soon as practicable or as specified by the executive director.

(2) Buffer requirements.

(A) The buffer requirements in Figure 1 must be satisfied at the time that the AFO operator does any of the following:

(i) claims authorization under the air standard permit for an AFO already in operation; or

(ii) begins construction of a new AFO; or

(iii) begins construction for expansion or modification of an AFO already in operation by performing activities including, but not limited to, increasing the maximum number of animals

confined under the water quality authorization, constructing new pens, or constructing or modifying retention control structures.

Figure 1: 30 TAC §321.43(i)(2)(A)

AFO Status and Proposed Action	Buffer Option 1	Buffer Option 2
Construction of an AFO that started or plans to start operations after August 19, 1998.	½ mile buffer	1/4 mile buffer and an odor control plan in accordance with §321.43(j)(2)(F)
Expansion of an AFO that started operations after August 19, 1998.	½ mile buffer	1/4 mile buffer and an odor control plan in accordance with §321.43(j)(2)(F)
Continued operation of an AFO that was in operation on or before August 19, 1998.	1/4 mile buffer	odor control plan in accordance with §321.43(j)(2)(F)
Expansion or modification of an AFO that was in operation on or before August 19, 1998.	1/4 mile buffer	odor control plan in accordance with §321.43(j)(2)(F)

(B) The operator of an AFO shall document that the applicable buffer requirement is satisfied in accordance with subparagraph 2(A). The operator of an AFO must maintain such documentation on-site and make it available on request by any representative of the commission.

(C) The buffer distance shall be measured from the nearest edge of the permanent odor sources to the nearest edge of any occupied residence or business structure, school (including associated recreational areas), place of worship, or public park.

(D) Written, including a letter, easement, or lease agreement specifically consenting to location and operation of an AFO within the required minimum buffer distance in §321.43(j)(2)(A) from the owner of the land containing each occupied residence or business structure, school, place of worship, or public park located within the buffer distance may be obtained in lieu of satisfying the buffer distance requirements in Figure 1. An easement must be recorded with the county. The written consent must include the following information at the time the actions specified in subparagraph 2(A) occur:

(i) the name, physical address, mailing address, and phone number of the owner(s) of the land containing the receptor,

(ii) the types of animals and maximum number of animals to be confined under the AFO operator's current and/or anticipated authorization,

(iii) a description of the activity within the buffer distance for which the owner of the land containing the receptor is giving consent,

(iv) the description and location of permanent odor sources or other facilities located or proposing to locate within the buffer distance,

(v) an acknowledgment by the owner of the land containing the receptor located within the buffer distance that the consent for the owner of the land containing the AFO to locate or operate within the buffer distance excuses the operator of the AFO from otherwise applicable legal requirements,

(vi) the verified signature of the owner(s) of the land containing the receptor who is consenting to the location or operation of the AFO within the buffer distance.

(E) An area land use map as defined by §321.32(5), an odor control plan, if required by §321.43(i)(2)(A), and documentation and copies of the written consent from landowners within the buffer distance shall be kept on-site and made available on request by the executive director.

(F) The odor control plan, if required by §321.43(j)(2)(A), shall be developed and implemented to control and reduce odors, dust, and other air contaminants as defined by TCAA, §382.003(2) from the AFO. The plan shall identify all structural and management practices that the operator will employ to minimize odor and control air contaminants at the AFO. At a minimum, the plan must include , where applicable, procedures for manure/litter collection, manure, litter and wastewater storage and treatment, land application, dead animal handling, and dust control . If the executive director determines that the implementation and employment of these practices is not effective in controlling dust, odors, and other air

contaminants, the operator shall include any necessary additional abatement measures in the odor control plan and implement those measures to control and reduce these contaminants within the time period specified by the executive director.

(3) Wastewater treatment. Retention control structures at AFOs that produce process-generated wastewater (excluding water trough overflow in open lots and wastewater from boiler operations) shall be designed to minimize odors in accordance with accepted engineering practices. Each system shall be operated in accordance with an operation and maintenance plan that minimizes odors.

(A) Accepted engineering practices include anaerobic treatment lagoons, aerobic treatment lagoons, or other equivalent technology used to reduce odors. The retention control structures must also meet the design criteria specified for water quality in this subchapter.

(B) Accepted design standards and requirements for each of these methods of treatment are:

(i) Anaerobic treatment lagoons shall be designed in accordance with American National Standards Institute (ANSI)/American Society of Agricultural Engineers (ASAE) EP403.3 July 1999 (or subsequent updates); Natural Resources Conservation Service (NRCS), Field Office Technical Guidance, Practice Standard 359, Waste Treatment Lagoon; or the equivalent for the control of odors. The primary lagoon in a multi-stage lagoon system shall be designed so that the lagoon maintains a constant level at all times unless

prohibited by climatic conditions. A multi-stage system shall be designed to route contaminated stormwater runoff around the primary lagoon and into the secondary structure.

(ii) Aerobic treatment lagoons shall be designed in accordance with Natural Resources Conservation Service (NRCS), Field Office Technical Guidance, Practice Standard 359, Waste Treatment Lagoon; or technical requirements for sizing the aeration portion of the system located in Chapter 317 of this title (relating to Design Criteria for Sewerage Systems).

(iii) Equivalent technology or design standards shall indicate how the design of the AFO minimizes odors equivalent to an aerobic or anaerobic lagoon. These designs shall be developed and certified by a Texas licensed professional engineer. An "as-built" certification in letter form shall be completed by a Texas licensed professional engineer before operation of the AFO. These documents must be maintained on site and made available within the time period specified by the executive director.

(4) Dust control. To minimize dust emissions, the AFO shall be operated and maintained as follows:

(A) Fugitive emissions from all grain receiving pits, where a pit is used, shall be minimized through the use of "choke feeding" or through an equivalent method of control. If choke feeding is used, operation of conveyors associated with receiving shall not commence until the receiving pits are full.

(B) As necessary emissions from all in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas shall be controlled with one or more of the following methods to minimize nuisance conditions and maintain compliance with all applicable commission requirements:

(i) sprinkled with water,

(ii) treated with effective dust suppressant(s),

(iii) paved with a cohesive hard surface and cleaned.

(C) All non-vehicular external conveyors or other external conveying systems associated with the feedmill shall be enclosed.

(D) On-site feed milling operations with processing equipment using a pneumatic conveying system (which may include but is not limited to pellet mill/pellet cooler systems, flaker systems, grinders, roller-mills) shall vent the exhaust air through a properly-sized high efficiency cyclone collector or an equivalent control device before releasing the exhaust air to the atmosphere. This requirement does not include cyclones used as product separators.

(E) If the executive director determines that the implementation and employment of these practices is not effective in controlling dust, the operator shall implement any necessary additional

abatement measures to control and minimize this contaminant within the time period specified by the executive director.

(5) Maintenance and housekeeping. The AFO operator shall comply with the following to help prevent nuisance conditions:

(A) The premises shall be kept clean to prevent the occurrence of nuisance conditions from odors and dust. Spillage of any raw products or waste products shall be picked up and properly disposed of daily.

(B) Good pen drainage shall be maintained at all times. Earthen pen areas shall be maintained by scraping uncompacted manure and shaping pen surfaces as necessary to minimize odors and ponding and to maintain a packed pen surface.

§321.44. CAFO Notification Requirements.

(a) Discharge Notification. If for any reason there is a discharge to water in the state, the CAFO operator shall notify the executive director's Office of Compliance and Enforcement, Enforcement Division orally within 24 hours or upon discovery of the discharge, whichever occurs first, and in writing within 14 working days of the discharge from the RCS or any component of the waste handling or land application system. In addition, the operator shall document the following information, keep the information on-site, and submit the

information to the appropriate regional office within 14 working days of becoming aware of such discharge. The notification must include:

(1) a description and cause of the discharge, including a description of the flow path to the receiving water body;

(2) an estimation of the volume discharged;

(3) the period of discharge, including exact dates and times, and, if not corrected, the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge;

(4) if caused by a precipitation event(s), the date(s) of the event(s) and the rainfall amount(s) recorded from the on-site rain gauge;

(5) results of analysis as required by paragraph (b) of this subsection;

(b) Discharge Monitoring. A permit or authorization will establish requirements for sample collection and analysis, sample type and frequency, and the parameters to be monitored.

(1) Sample analysis of the discharge must, at a minimum, include the following:

(A) Fecal Coliform bacteria;

(B) Total Coliform;

(C) 5-day Biochemical Oxygen Demand (BOD5);

(D) Total Suspended Solids (TSS);

(E) ammonia nitrogen (as N);

(F) Nitrate (N);

(G) Total Dissolved Solids (TDS); and

(H) any pesticide which the operator has reason to believe could be in the discharge.

(2) If the operator is unable to collect samples due to climatic conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.), the operator shall document why discharge samples could not be collected. Once dangerous conditions have passed, the operator shall conduct the required sampling.

(c) Construction Notification. After all initial construction activity has been completed, and before beginning operations, an operator of a new CAFO must notify the appropriate regional office orally that the facility is commencing operations.

§321.45. CAFO Training Requirements.

(a) Employee Training. A permit or authorizations will establish requirements for training of employees who are responsible for work activities relating to compliance with provisions of this subchapter addressing all levels of job responsibility associated with compliance with this subchapter.

(b) Dairy Outreach Program Area Operator Training. The operator of a CAFO located within an area specified in the definition of Dairy Outreach Program Areas in §321.32(16) of this title (relating to Definitions) shall attend and complete training developed by the executive director and the Texas Cooperative Extension as follows:

(1) an eight-hour course or its equivalent on animal waste management within 12 months of receiving authorization under this subchapter; and

(2) at least eight additional hours of continuing animal waste management education or its equivalent for each two-year period after completing the requirements of paragraph (1) of this subsection.

§321.46. CAFO Pollution Prevention Plan, Site Evaluation, and 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 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 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 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 amend the plan:

(A) before any change in the number or configuration of land management units;

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

(C) before any new construction of control facilities;

(D) before any change that 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 pollutants in discharges from the CAFO 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 documentation is sufficient to document best management practices (BMPs) or applicable portions of the PPP requirements in this subchapter. Where provisions in the certified plan are substituted for applicable best

management practices or portions of the PPP, the PPP must refer to the appropriate section of the certified plan. If the PPP contains reference to a certified plan, a copy of the certified plan must be kept in the PPP.

(6) The PPP shall provide a description of potential pollutant sources. Potential pollutant sources include any activity or material that may reasonably be expected to add pollutants to water in the state from the facility, including the AFO, the associated control facilities and land management units. An evaluation of potential pollutant sources shall identify the types of pollutant sources, provide a description of the pollutant sources, and indicate all measures that will be used to prevent contamination from the pollutant sources. A permit or authorization will establish specific provisions requiring an operation to evaluate a particular site and potential pollutant sources and activities.

(7) A permit or authorization will establish requirements for the development and retention by the operator of:

(A) a site map, including a depiction of buffer zones and setbacks;

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

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

(D) a description of best management practices 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 record keeping and documentation of facility management activities. At a minimum, these records must include:

(1) a copy of the administratively complete and technically complete permit application, notice of intent seeking authorization under a 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) the written procedures for spill prevention and recovery for all toxic pollutants used on-site;

(4) a copy of the approved recharge feature certification; ~~and~~

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

(6) a copy of the NMP or NUP, 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 irrigation of manure, litter or wastewater;

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

(10) documentation of employee training, including dates when training occurred and for DOPA-required training, verification of the date, time of attendance, and completion of training.

(c) Site Evaluation.

(1) Once every five years the CAFO operator shall have a NRCS engineer, licensed professional engineer or licensed professional geoscientist review the existing engineering documentation, complete a site evaluation of the structural controls, review existing liner documentation, and complete and certify a report of their findings.

(2) A complete inspection of the facility, including the CAFO, the associated control facilities and land management units shall be completed by the CAFO operator and a report documenting the findings of the inspection made at least once per year. The inspection shall verify that:

(A) the description of potential pollutant sources is accurate;

(B) the site plan/map has been updated or otherwise modified to reflect current conditions; and

(C) the controls outlined in the PPP to reduce pollutants and avoid nuisance conditions are being implemented and are adequate.

(D) Records documenting significant observations made during the site inspection shall be retained.

(d) Recordkeeping Requirements. The CAFO operator shall keep records on site for a minimum of five years from the date the record was created and shall submit them within five days of a written request by the executive director. The following records must be included:

(1) a list of any significant spills of potential pollutants at the CAFO;

(2) a log of wastewater, manure, litter and sludge removal that shows the dates, times and location of application or disposal;

(3) a log of all daily measurable rainfall events, including the measured rainfall;

(4) a log of all daily wastewater levels observed in the RCS, if applicable;

(5) documentation of liner maintenance by a NRCS engineer, licensed professional engineer, or qualified groundwater scientist;

(6) groundwater monitoring records, if required by §321.41 of this title (relating to Special Requirements for Discharges to a Playa);

(7) records showing that the control facilities have been inspected at least quarterly for structural integrity and maintenance, including the date of each inspection and a description of the findings;

(8) records of all manure, litter and wastewater either used at the facility or removed from the facility, updated at least monthly. For CAFOs where manure, litter or wastewater is applied on property owned, operated, controlled, rented, or leased by the CAFO owner or operator, such records must include the following information:

(A) date of manure, litter or wastewater application to each field;

(B) location of the specific LMU and the volume applied during each application event;

(C) acreage of each individual crop on which manure, litter or wastewater is applied;

(D) basis for and the total amount of nitrogen and phosphorus applied per acre to each field, including sources of nutrients other than manure, litter or wastewater on a dry basis, and

(E) the percent moisture content of the manure; and

(F) actual annual yield of each harvested crop, and

(G) weather conditions during the land application and 24 hours before and after the land application.

(9) annual nutrient analysis for at least one representative sample of irrigation wastewater and one representative sample of manure/litter for total nitrogen, total phosphorus, and total potassium;

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

(11) monthly records describing disposal and storage of toxic pollutants, including pesticide containers; and

(12) copies of all notifications to the executive director, including any made to a regional office, as required by this subchapter, a permit, or authorization.

(e) Reporting Requirements.

(1) The CAFO operator shall furnish to the executive director's Office of Compliance and Enforcement, Enforcement Division, soil testing analysis of all soil samples within 60 days of the date the samples were taken in accordance with the requirements of this subchapter.

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

§321.47. Requirements for AFOs Not Defined or Designated As CAFOs.

(a) Purpose. This section provides an AFO that is not defined or designated as a CAFO authorization to operate and identifies the operational requirements necessary to achieve the purposes of this subchapter.

(b) General Requirements.

(1) An AFO operator must locate, construct, and manage the control facility and land management unit (LMU) in a manner that will protect surface and groundwater quality.

(2) An AFO operator must prevent nuisance conditions and minimize odor conditions in accordance with the requirements of §321.43 of this title (relating to Air Standard Permit for Animal Feeding Operations).

(3) The AFO is allowed to discharge from the production area, if the discharge is the result of a rainfall event which exceeds the design capacity of a retention control structure that has been properly designed, constructed, operated and maintained. Retention control structures shall be designed in accordance with §321.38 of this title (relating to Control Facility Design Requirements Applicable to AFOs.

(4) An AFO shall not expand operations, either in size or numbers of animals, before amending or enlarging the waste handling procedures and structures to accommodate all additional wastes that will be generated by the expanded operations.

(5) As applicable to the operation, the production area of a new or expanding AFO must comply with the requirements of §321.41 of this title (relating to Special Requirements for Discharges to a Playa).

(6) All control facilities, including holding pens and retention control structures, must be located outside of the 100-year flood plain, as defined in Chapter 301 of this title (relating to Levee Improvement Districts, District Plans of Reclamation, and Levees and Other Improvements), unless the facility is protected from innundation and damage from a 100-year, 24-hour rainfall event.

(7) Where applicable, equivalent measures contained in a site specific plan which meet the requirements of this subchapter may be substituted for applicable BMPs and/or portions of the technical requirements in this subchapter. Equivalent measures may be contained in:

(A) USDA-NRCS Field Office Technical Guide (FOTG) for Texas; and/or

(B) Texas State Soil and Water Conservation Board (TSSWCB) regulations; and/or

(C) Certified water quality management plan certified by the Texas State Soil and Water Conservation Board (TSSWCB); and/or

(D) Comprehensive nutrient management plan certified by the Texas State Soil and Water Conservation Board (TSSWCB), the USDB-Natural Resource Conservation Service (NRCS), or their designee.

(c) Control Facilities.

(1) The AFO operator shall minimize entry of non-process wastewater into retention control structures. Such measures may include the construction of berms, embankments, or similar structures.

(2) Good pen drainage shall be maintained at all times. Earthen pen areas shall be maintained by scraping uncompacted manure and shaping pen surfaces as necessary to minimize odors and ponding and to maintain a packed pen surface.

(3) The AFO operator constructing a new or modifying an existing retention control structure shall insure that all construction and design is certified by a licensed Texas Professional Engineer. The certification shall be signed and sealed in accordance with Texas State Board of Professional Engineers requirements. All retention control structure design and construction shall, at a minimum, be in accordance with the technical standards developed by the NRCS. The operator must use those standards that are current at the time of construction. Where site-specific variations are warranted, the operator must ensure a Texas licensed professional engineer documents these variations and their appropriateness to the plan.

(4) Existing facilities which have been properly maintained and show no signs of structural breakage or leakage will be considered to be properly constructed. Structures built in accordance with site-specific NRCS plans and specifications will be considered to be in compliance with the design and capacity requirements of this subchapter if the site-specific conditions are the same as those used by the NRCS to develop the plan (numbers of animals, runoff area, wastes generated, etc.).

(5) RCS embankments and liners shall be designed and constructed in accordance with the requirements of §321.38 of this title (relating to Control Facility Design Requirements Applicable to AFOs)

(6) The AFO operator shall adhere to the well buffer requirements in §321.38 of this title.

(7) The AFO operator must maintain copies of documentation of the sources of information, assumptions and calculations used in determining the appropriate volume capacity of the retention facilities.

(8) Retention control structures shall be equipped with either irrigation or evaporation or liquid removal systems capable of dewatering the retention control structures.

(9) Sludge shall be removed from retention control structures in accordance with the design schedule for cleanout to prevent the accumulation of sludge from exceeding the designed sludge volume of the structure.

(d) Operation and Maintenance.

(1) Sufficient volume shall be maintained at all times within the retention control structure to accommodate sludge, wastewaters, and contaminated storm water (rainwater runoff and direct precipitation) from the animal feeding operation facility.

(2) The operator shall restore such capacity after each rainfall event or accumulation of manure, sludge, or process generated wastewater that reduces such capacity, when conditions are favorable for irrigation. Favorable conditions shall be when the soil moisture level decreases so that irrigation will not cause runoff.

(3) The normal operating wastewater level in the RCS shall be maintained within the design of the RCS. If the water level in the RCS encroaches into the storage volume reserved for the design rainfall event (25-year or 100-year) the operator must document the conditions that resulted in this occurrence. As soon as irrigation is not prohibited, the AFO operator shall irrigate until the water level is at or below the planned operating level expected during that month.

(4) Adequate equipment for the volume of RCS shall be available and maintained in good working order for removal of such waste and wastewater as required to maintain the retention capacity of the facility for compliance with this subchapter.

(5) A rain gauge capable of containing the required rainfall event shall be kept on site and properly maintained.

(6) A permanent marker (measuring device) shall be maintained in the retention control structure to show the following: the volume for a 25-year, 24-hour rainfall event or a 100-year, 24-hour rainfall event, as required by the facility's design standard; and the predetermined minimum treatment volume within any treatment lagoon. The marker shall be visible from the top of the levee.

(7) The AFO operator shall insure liners are protected from animals by fences or other protective devices. No tree shall be allowed to grow such that the root zone would intrude or compromise the

structure of the liner. Any mechanical or structural damage to the liner shall be evaluated by a NRCS engineer or a licensed professional engineer within 30 days of the damage.

(8) The AFO operator shall maintain ponds, pipes, ditches, pumps, and diversion and irrigation equipment to insure ability to fully comply with the terms of this subchapter.

(9) An AFO operator using a liquid manure handling system shall scrape or flush accumulated manure at least once per week or in accordance with proper design and maintenance of the facility.

(e) Land Application.

(1) The runoff of manure, litter or wastewater to water in the state as the result of the application of manure, litter, or wastewater from an AFO is authorized provided the land application activity is implemented in accordance with this section.

(2) The AFO operator shall apply manure, litter, and wastewater uniformly to suitable land at appropriate times and at agronomic rates. Timing and rate of applications shall be in response to crop needs, assuming usual nutrient losses, expected precipitation, and soil conditions.

(3) The AFO operator must adhere to the following requirements and shall follow those requirements for land application unless a nutrient management plan (NMP) is developed and implemented. At that time, the NMP will replace the requirements of this subsection.

(A) a site map showing the location of any land application areas, either on-site or off-site which are owned, operated, or under the control of the facility owner or operator which will be utilized for land application of waste or wastewater;

(B) the location, description, and limitations of the major soil types within the identified land management units, and a plan to address the soil limitations;

(C) crop types and rotations to be implemented on an annual basis;

(D) predicted yield goals based on the major soil types within the identified land management units;

(E) procedures for calculating nutrient budgets to be used to determine application rates;

(F) a detailed description of the type of equipment and method of application to be used in applying the waste or wastewater; and

(G) projected rates and timing of application of the manure and wastewater as well as other sources of nutrients that will be applied to the land management.

(4) Discharge of manure, litter or wastewater from the application site is prohibited and shall not cause or contribute to a violation of surface water quality standards, contaminate groundwater, or create a nuisance condition.

(5) Application rates shall not exceed the nutrient uptake of the crop coverage or planned crop planting with any land application of wastewater and/or manure. Land application rates of wastewaters shall be based on the available nutrient content.

(6) Land application shall not occur when the ground is frozen or saturated or during rainfall events (unless in accordance with §321.39(b)(3)).

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

(8) The land application of manure, litter, and wastewater at agronomic rates shall not be considered surface disposal and is not prohibited.

(9) Manure, litter, 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.

(10) The AFO operator shall develop and maintain the calculations and assumptions used for determining land application rates and all nutrient analysis data.

(11) The AFO operator shall annually analyze at least one representative sample of irrigation wastewater and one representative sample of manure/litter for total nitrogen, total phosphorus, and total potassium.

(12) Vegetative buffer strips shall be no less than 100 feet of vegetation to be maintained between waste or wastewater application areas and surface water and watercourses. The AFO operator shall maintain the buffer strips in accordance with NRCS guidelines.

(13) Manure/litter storage capacity requirements based upon manure/litter and waste production, land availability, and the NRCS FOTG shall be provided. Permanent storage structures for AFO operations must meet NRCS design specifications. All litter/manure removed from operation and not temporarily stored must be located within the drainage of the RCS, in a well drained area with no ponding of water, where the top and sides of stockpiles are adequately sloped to ensure proper drainage to prevent polluted rainfall runoff.

(14) Temporary storage of manure in the 100-year flood plain, near water courses or recharge features is prohibited unless protected by berms or other structures. Temporary storage of manure/litter shall not exceed 30 days and is only allowed in land management units. Polluted runoff from manure/litter storage piles must be retained on site.

(15) Any dairy AFO that is located in the major sole source impairment zone, as defined under §321.32, at a minimum must provide for management and disposal of waste in accordance with §321.42(i).

(16) Nighttime application of liquid or solid waste shall be allowed only in areas with no occupied residence(s) within 0.25 mile from the outer boundary of the actual area receiving manure/litter or wastewater application. In areas with an occupied residence within 0.25 mile from the outer boundary of the actual area receiving manure/litter or wastewater application, application shall only be allowed from one hour after sunrise until one hour before sunset, unless the current occupants of such residences have, in writing, agreed to such nighttime applications.

(17) AFOs introducing wastewater or chemicals to water wellheads for the purpose of irrigation shall install backflow prevention devices.

(18) Composting on-site at an AFO shall be performed in accordance with Chapter 332 of this title (relating to Composting). AFOs may compost waste generated on-site, including manures, litters, bedding,

feed, and dead animals. Pursuant to Chapter 332 of this title (relating to Composting), an AFO operator may add agricultural products to provide an additional carbon source or bulking agent to aid in the composting process. If the compost 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 compost areas.

(19) Maintenance of animals.

(A) Animals confined at the AFO shall be restricted from coming into direct contact with surface water in the state through the use of fences or other controls.

(B) An AFO that maintains animals in pastures must maintain crops, vegetation, forage growth, or postharvest residues in the normal growing season, excluding the feed and water trough areas and open lots designated on the site map.

(f) Soil Sampling and Testing.

(1) Land management units where manure, litter, or wastewater is not applied during the preceding year(s), soil samples are not required to be collected. However, provisions of this section must be followed prior to re-starting land application to the un-used LMU.

(2) Prior to commencing wastewater irrigation or manure, litter application on land owned or operated by the CAFO operator, and annually thereafter, the operator shall collect and analyze representative soil samples from each of the land management units according to the following procedures.

(3) Sampling procedures shall employ accepted techniques of soil science for obtaining representative samples and analytical results. Samples should be collected using approved procedures described in the executive director's guidance entitled "Soil Sampling for Nutrient Utilization Plans."~~.~~

(4) Samples should be collected taken within the same 45-day time frame each year.

(5) Obtain one composite sample for each soil depth zone per land management unit and per uniform (soils with the same characteristics and texture) soil type within the land management unit.

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

(A) Zone 1: 0 - 6 inches for land management units where the manure or litter is incorporated directly into the soil or 0 - 2 inches for land management units where the waste is not incorporated into the soil; if a 0 - 2 inch sample is required under this subsection, then an additional sample from the 2 - 6 inch soil depth zone shall be obtained in accordance with the provisions of this section, and

(B) Zone 2: 6 - 24 inches.

(7) Soil samples shall be submitted to a soil testing laboratory along with a previous crop history of the site, intended crop use, and yield goal. Soil test reports shall include nutrient recommendations for the crop yield goal.

(8) Chemical/nutrient parameters and analytical procedures for laboratory analysis of soil samples from land management units shall include the following:

(A) nitrate reported as nitrogen in ppm;

(B) phosphorus (extractable, ppm) - Mehlich III;

(C) potassium (extractable, ppm);

(D) sodium (extractable, ppm);

(E) magnesium (extractable, ppm);

(F) calcium (extractable, ppm);

(G) soluble salts/electrical conductivity (dS/m) - determined from extract of 2:1 (v/v) water/soil mixture; and

(H) soil water pH.

(g) Nutrient Utilization Plans (NUP).

(1) When results of the annual soil analysis for extractable phosphorus indicate a level greater than 200 ppm of extractable phosphorus (reported as P) in Zone 1 for a particular land management unit or a level greater than 350 ppm of extractable phosphorus in Zone 1 (0-6 inch depth) for a LMU where the average annual rainfall is 25 inches or less, 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, if ordered by the commission to do so in order to protect the quality of waters in the state, then the operator shall not land apply any waste or wastewater to the affected area unless the waste or wastewater application is implemented in accordance with a detailed nutrient utilization plan.

(2) A certified NRCS Nutrient Management Plan (NMP) (NRCS Practice Standard Code 590) complies with the requirements of a complete and effective NUP.

(3) A NUP must be developed by an employee of the NRCS, a nutrient management specialist certified by the NRCS, the Texas State Soil and Water Conservation Board, Texas Cooperative Extension, an

agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas, or a professional agronomist or soil scientist certified by the American Registry of Certified Professionals in Agronomy, Crops and Soils (ARCPACS), 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. No land application under an approved nutrient utilization plan shall cause or contribute to a violation of water quality standards or create a nuisance.

(4) Land application under the terms of the NUP may begin as soon as the plan is developed in accordance with this subsection.

(h) Recordkeeping Requirements.

(1) Records required under this subsection must be kept on site for a minimum of five years from the date the record was created. Records shall include:

(A) a list of any significant spills of potential pollutants at the facility after September 18, 1998, or for new facilities, since date of operation;

(B) a schedule for liquid waste removal;

(C) a date log indicating weekly inspection of wastewater level in the retention control structure;

(D) a log of all measurable rainfall events; and

(E) a copy of the results of initial and annual soils, manure, litter, and wastewater analyses;

(F) records of dates of inspection of the retention control structure, and a log of the findings of such inspections;

(G) records of all manure, litter, and wastewater either utilized at the facility or removed from the facility;

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

(I) a copy of the NUP, if required;

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

(K) any written agreement with a landowner which documents the allowance of nighttime irrigation of manure, litter or wastewater; and

(L) the odor control plan requirements established in §321.43 of this title (relating to Air Standard Permit for Animal Feeding Operations).

(2) For facilities where manure, litter, or wastewater is applied on property owned, operated, or controlled by the AFO owner or operator, such records shall include the following information:

(A) date of manure, litter, or wastewater application to each field;

(B) location of the specific application site and the number of acres utilized during each application event;

(C) acreage of each individual crop on which manure, litter, or wastewater is applied;

(D) basis for and the total amount of nitrogen and phosphorus applied per acre to each field, including sources of nutrients other than manure, litter, and wastewater, number of dry tons, percent nitrogen/phosphorus based on a dry basis;

(E) the percent moisture content of the manure; and

(F) actual annual yield of each harvested crop.

(3) Where manure, litter, or wastewater is removed from the facility, records must be maintained in accordance with §321.46(d)(8) of this title (relating to CAFO Pollution Prevention Plan, Site Evaluation, and Recordkeeping and Reporting). If manure is sold or given to other persons for off-site land application or disposal, the operator must maintain a log of: date of removal from the CAFO; name of hauler; and amount, in wet tons, dry tons, or cubic yards, of waste removed from the CAFO. (Incidental amounts, given away by the pick-up truck load, need not be recorded.) Where the wastes are to be land applied by the hauler, the operator must make available to the hauler any nutrient sample analysis of the manure from that year.

(i) Documentation of liner maintenance. The operator shall have a NRCS engineer, Texas licensed professional engineer, or qualified groundwater scientist review the documentation and do a site evaluation every five years.

(j) Groundwater Monitoring. In the event that one or more groundwater monitoring wells are ~~is~~ required, the operator must sample each monitor well according to the groundwater monitoring plan annually for nitrate as nitrogen, chloride, and total dissolved solids using the methods outlined in the pollution prevention plan, and compare the analytical results to the baseline data. Data from any required monitoring wells must be submitted to the executive director and kept on site for five years. The first year's sampling shall be considered the baseline data and must be retained on site for the life of the facility unless otherwise provided by the

executive director. If a 10% deviation in concentration of any of the sampled constituents is found, the operator must notify the executive director within 30 days of receiving the analytical results.

(k) Inspections. The AFO operator must conduct the following inspections to assure the facility maintains its efficiency.

(1) Control facilities shall be inspected at least four times per year for structural integrity and maintenance.

(2) Preventative Maintenance Program. The operator shall periodically inspect designated equipment and facility areas. Material handling areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system or the creation of a nuisance. Inspections shall include visual inspections and equipment testing to uncover conditions that could cause breakdowns or failures resulting in discharge of pollutants to waters in the state or the creation of a nuisance condition.

(3) Site Inspection. A complete inspection of the facility shall be done and a report documenting the findings of the inspection made at least once/year. The inspection shall be conducted by the operator to verify that the description of potential pollutant sources is accurate; the site plan/map has been updated or otherwise modified to reflect current conditions; and the controls necessary to reduce pollutants and avoid nuisance conditions are being implemented and are adequate. Records documenting significant

observations made during the site inspection shall be retained. Records of inspections shall be maintained for a period of five years.

(l) Notification. An existing or new AFO operator has the continuing obligation to provide the executive director notice of the number of animals in confinement in accordance with the following requirements:

(1) All new animal feeding operations which confine a number of animals that fall within the range of the number of animals specified in any of the categories under §321.32(12)(B) of this title (relating to Definitions) shall notify the executive director of their legal entity name, physical location including a map or hand drawn sketch, mailing address and number of head in confinement.

(2) Such notification shall be in writing and signed by the operator and shall be submitted not later than 180 days after commencement of operation.

(m) Closure Required. The AFO operator shall properly close the AFO and retention control structure within one year of inactivity or ceasing operations at the facility or in accordance with an alternative schedule in a closure plan prepared by a licensed professional engineer. The closure plan must be developed using standards contained in the Texas Cooperative Extension /NRCS technical guidance publication # B-6122 (Closure of Lagoons and Earthen Manure Storage Structures). AFOs shall maintain compliance with the requirements of this subchapter until the facility has been properly closed.

SUBCHAPTER B: CONCENTRATED ANIMAL FEEDING OPERATIONS
§321.48, §321.49

STATUTORY AUTHORITY

§321.48. Regulation of Certain Dairy Concentrated Animal Feeding Operations (CAFOs).

§321.49. Dairy Waste Application Field Soil Sampling and Testing.