The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the addition of new §§321.48, 321.49, 321.401, 321.403, 321.405, 321.407, 321.409, 321.411, and 321.413.

New §§321.48, 321.49, 321.401, 321.403, 321.407, 321.409, 321.411, and 321.413 are adopted without changes to the proposed text as published in the February 28, 2025, issue of the *Texas Register* (50 TexReg 1632) and, therefore, will not be republished.

New §321.405 is adopted with changes to the proposed text as published in the February 28, 2025, issue of the *Texas Register* (50 TexReg 1632) and, therefore, will be republished.

Background and Summary of the Factual Basis for the Adopted Rules

TCEQ is adopting amendments to 30 Texas Administrative Code (TAC) Chapter 321 (Control of Certain Activities by Rule), Subchapter B (Concentrated Animal Feeding Operations) and add new Subchapter Q (Land Application of Dairy Waste Authority) to implement House Bill (HB) 692, 88th Legislative Session, which added §26.0481 to Chapter 26, Subchapter B of the Texas Water Code (TWC) and §361.1215 to Chapter 361, Subchapter C of the Texas Health and Safety Code (THSC). The bill directs TCEQ to: 1) issue an authorization by rule for land application of dairy waste and to adopt rules governing that land application (THSC §361.1215); 2) adopt rules allowing the disposal of dairy waste from dairy operations either permitted as a concentrated animal feeding operation (CAFO) or unpermitted animal feeding operation (AFO) into a

control or retention facility, including a lagoon or playa (TWC §26.0481(b)(1)); and, 3) authorize land application by irrigation associated with that disposal (TWC §26.0481(b)(2)).

TCEQ is adopting new §321.48 and §321.49 to the CAFO rules in 30 TAC Chapter 321, Subchapter B, that allow dairy operations to land apply dairy waste directly to land application areas, or put dairy waste in a retention control structure (RCS), including a lagoon or playa, and subsequently irrigate land application areas with dairy waste from the RCS. These activities are only allowed under emergency conditions.

TCEQ adopts the addition of new §§321.401, 321.403, 321.405, 321.407, 321.409, 321.411, and 321.413 under new 30 TAC Chapter 321, Subchapter Q, that allow entities, including landowners and any person along the dairy supply chain (milk haulers, milk processing plant, and milk bottling facilities), to directly land apply dairy waste, under emergency conditions, on agricultural land that is not associated with an animal feeding operation or any other TCEQ authorization.

As part of this rulemaking, the commission is also adopting amendments of 30 TAC Chapter 335 (Industrial Solid Waste and Municipal Hazardous Waste) concurrently in this issue of the *Texas Register*.

Section by Section Discussion

Information from the State Technical Standards of the Natural Resource Conservation Service (NRCS) for Nutrient Management Code 590 are included for guidance. The requirements of the new CAFO Rules mandate dairy operators to update the sitespecific nutrient management plan (NMP) if commencing land application of dairy waste and to irrigate land application areas based on the application rates that are determined in accordance with the narrative rate approach from both Title 40 Code of Federal Regulations (CFR) §122.42(e)(5)(ii), and the rules found at 30 TAC §321.36(c) or §321.47(f)(3) of this title. This approach allows changes to the NMP to occur at the facility at any time, and adjustments can be made in the implementation of the plan.

The adopted rules include water quality-based limitations to control all pollutants that could be discharged at a level that will cause, or have the reasonable potential to cause, or contribute to an excursion above any state water quality standard. This includes water quality-based effluent limitations for the production area and land application area of dairy operations. All recordkeeping and annual reporting requirements are under new §321.48 and §321.49.

New §321.48, *Land Application of Dairy Waste*, establishes rules to provide authorization to a dairy operation to directly land apply dairy waste, and transfer and receive third-party (i.e., off-site) dairy waste to apply to land that is under the control of a permitted or an unpermitted AFO.

New §321.48(a), *Definitions*, establishes definitions for dairy operation, dairy waste, and emergency conditions. The definition of dairy waste maintains the statutory definition with additional language added to clarify the regulatory focus on liquid dairy waste and exclusion of solid and semi-solid forms of dairy waste. The definition of "emergency conditions" is consistent with the statutory definition in Texas Government Code §551.045(b)(2), with the addition of ice storm, mechanical failure, and any other situation deemed by the executive director to qualify as an emergency.

New §321.48(b), *Duration of Authorization*, limits the duration of the authorization for land application of dairy waste from the first day of the emergency condition(s) to seven (7) calendar days after the emergency condition has ended. Seven calendar days allows sufficient time to manage dairy waste after the emergency condition ends, however in the event that additional time is needed, the executive director can extend the duration of the authorization.

New §321.48(c), *Purpose*, establishes that new section §321.48 provides authorization to a dairy operation to land apply dairy waste, including dairy waste received from a third party, under emergency conditions to land that is under the control of a dairy CAFO or unpermitted AFO.

New §321.48(d), *Applicability*, establishes a requirement for the owner or operator of a dairy operation that generates dairy waste and the owner or operator of the dairy

operation that accepts dairy waste to comply with all the requirements of new section §321.48.

New §321.48(e), General Requirements, establishes the requirements for land application of dairy waste by CAFOs and AFOs. The Section references §321.40 of this title (relating to Concentrated Animal Feeding Operation (CAFO) Land Application Requirements) and the AFO requirements in §§321.47(f) relating to land application, (h) nutrient utilization plans, and (i) record keeping requirements. The adopted rule requires that dairy waste be evenly applied to fields that are vegetated with actively growing crops, or incorporated into the soils if applied to a fallow field. To protect surface and groundwater, the adopted rule would limit the maximum application rate to 2,000 gallons per acre per year, require setbacks for wells and surface waters, and prohibit land application in the 100-year floodplain. To reduce the occurrence of nuisance odors, land application of dairy waste is prohibited within 750 feet from an occupied residence or business structure, school (including associated recreational areas), permanent structure containing a place of worship, or public park. Lastly, to prevent over-application of nutrients, land application of dairy waste is prohibited on land application areas that have elevated nutrient levels or land management units (LMUs) with a nutrient utilization plan.

New §321.48(f), *Notification Requirements*, establishes requirements for a dairy operator to notify the appropriate TCEQ Regional Office orally within 24 hours or by the next business day, and in writing on paper, electronic mail or other electronic

method approved by the executive director within 14 days, of land applying dairy waste. The adopted new section establishes requirements for the written notification to contain the location of the disposal area; a description of the emergency condition; the date that dairy waste was applied; volume applied (gallons, or acre-feet); proof of authorization of the use of the field for dairy waste disposal if third-party (offsite) land was used; the duration of the emergency condition and if additional time will be needed; and a signed certification.

New §321.48(g), *Recordkeeping Requirements*, establishes requirements for a dairy owner or operator that land applies dairy waste to include certain information in the land application record in the onsite Pollution Prevention Plan (PPP). At a minimum, it must include a log of dairy waste land applied, weather conditions, documentation of any discharge of dairy waste, and a copy of notification(s) to the executive director.

New §321.48(h), *Discharge Notification*, establishes that requirements in §§321.44(a)(1) through (6) apply to the discharge of dairy waste.

New §321.48(i), *Discharge Monitoring*, establishes a requirement for the dairy operator to sample all discharges of dairy waste to surface water in the state and comply with the discharge monitoring in §321.44(b).

New §321.48(j), *Annual Reporting*, establishes a requirement for a dairy operator land applying dairy waste to include the information required by 321.48(g) in the annual

report required by 321.36(g) that is due to TCEQ on March 31, of each year. The adopted new subsection also establishes a requirement for dairy operators not authorized by permit to submit information regarding the total dairy waste (gallons, or acre-feet) generated and land applied by the same due date.

New §321.49, *Storage of Dairy Waste in a Retention Control Structure or Playa at an Animal Feeding Operation*, establishes rules to provide authorization to a dairy operation to store dairy waste in an RCS during emergency conditions.

New §321.49(a), *Purpose*, establishes that §321.49 provides authorization to a dairy operation to store dairy waste in an RCS or playa under emergency conditions and subsequently land apply the dairy waste.

New §321.49(b), *Applicability*, establishes that the provisions of §321.49 apply to an owner or operator of a dairy operation that stores dairy waste in an RCS, or playa that meets the special requirements for discharges of §321.41.

New §321.49(c), *Duration of Authorization*, limits the Authorization to put dairy waste in an RCS from the first day of the emergency condition(s) to seven (7) calendar days after the emergency condition ends. Seven calendar days allows sufficient time to manage dairy waste after the emergency condition ends, however in the event that additional time is needed, the executive director can extend the duration of the authorization.

New §321.49(d), *Discharge Restrictions*, establishes a prohibition on the discharge or disposal of dairy waste from a dairy operation into or adjacent to water in the state, except in accordance with new §321.49. The adopted section would establish a requirement for dairy waste generated by a dairy operation under this title to be retained and utilized in an appropriate and beneficial manner. The adopted section also establishes a requirement for disposal of dairy waste in an RCS to be subject to the effluent limitations in §321.37 and design requirements in §§321.38 and 321.42(c).

New §321.49(e), *Recordkeeping Requirements*, establishes the requirements for keeping records of dairy waste placed in an RCS or playa. Records include a log of monthly dairy waste received and stored at the AFO or CAFO.

New §321.49(f), *General Requirements*, establishes the requirements for disposal of dairy waste in an RCS or playa. Specifically, the adopted rule prohibits dairy waste storage in certain playas for compliance with TWC §26.048. The adopted rule also requires a dairy operation using an RCS for storage of dairy waste ensure that storage of dairy waste doesn't cause an unauthorized discharge from the RCS. The adopted rule also rule also requires oral and written notification to the TCEQ Regional Office when dairy waste is stored in an RCS.

New §321.49(g), *Dairy Waste Transfer*, establishes provisions to allow a dairy operation to transfer dairy waste to another dairy operation site for land application or storage

in an RCS to use for irrigation when needed. The adopted rule requires the owner or operator generating the dairy waste to keep a record of all dairy waste (gallons, or acre-feet) transferred to another dairy operation, the date of transfer, as well as the name(s) and address(es) of the recipients of the dairy waste.

Additionally, the adopted rule establishes a requirement for the owner or operator generating the dairy waste to provide the laboratory report for total nitrogen, total phosphorus, and total potassium content of the dairy waste to the receiver of the dairy waste. Book values for dairy waste nutrient contents may be used because under emergency conditions there may not be sufficient time to collect and analyze dairy waste and manage the dairy waste in a timely manner.

New §321.49(h), *Dairy Waste Received*, establishes requirements for a dairy operator that receives dairy waste to comply with the land application requirements in §321.48 or this section for storage of dairy waste in an RCS.

New §321.49(i), *Annual Reporting*, requires all information under §321.49(e) in the annual report required by §321.36(g) that is due to the TCEQ by March 31 of each year. The adopted new subsection also establishes a requirement for dairy operators not authorized by permit to submit information regarding the total dairy waste (gallons, or acre-feet) generated and land applied by the same due date.

The adopted rule creates new Chapter 321, Subchapter Q to authorize land application of dairy waste on agriculture land that is not part of an AFO or CAFO.

New Section §321.401, *Purpose and Applicability*, establishes that new Subchapter Q provides authorization by rule for direct land application of dairy waste, under emergency conditions, on agricultural land that is not associated with an animal feeding operation or any other TCEQ authorization and that the requirements of new Subchapter Q would apply to the entity or entities land applying the dairy waste and the owners of the land application area.

New §321.403, *Dairy Waste Management Alternatives*, lists options in addition to the adopted Sections 321.48, 321.49 and Subchapter Q, that a person or entity may use to manage dairy waste during emergency conditions. The section includes options such as direct land application to lands authorized under a Texas Pollutant Discharge Elimination System (TPDES) permit or Texas Land Application permit (TLAP) amended to include dairy waste management, disposal at a permitted solid waste landfill, disposal via a permitted injection well, hauling or discharging to a permitted domestic wastewater collection system with written consent from the plant operator or owner, or use as animal feed.

New §321.405, *Definitions*, establishes definitions for agronomic rate, agricultural land, dairy operation, dairy waste, emergency conditions, land application, and water in the state. The definition of dairy waste maintains the statutory definition with additional

language added to clarify the regulatory focus on liquid dairy waste and exclusion of solid and semi-solid forms of dairy waste. The definition of "emergency conditions" is consistent with the statutory definition in Texas Government Code §551.045(b)(2), with the addition of ice storm, mechanical failure, and any other situation deemed by the executive director to qualify as an emergency. The definition of "water in the state" is updated to reflect the change in name of the "Gulf of Mexico" to the "Gulf of America."

New §321.407, *Protection of Surface Water and Groundwater Quality*, establishes that new Subchapter Q does not authorize the discharge of dairy waste into water in the state, including surface water and groundwater, nor does it authorize any contamination of groundwater.

New §321.409, *General Requirements*, establishes requirements for land application of dairy waste under emergency conditions by owners and operators of agricultural operations that may receive dairy waste for beneficial use, and that the property owner consent would be required for all land application activities. The adopted rule requires that dairy waste be land applied to fields that are vegetated with actively growing crops, or incorporated into the soils if applied to a fallow field. To protect surface and groundwater, the adopted rule would limit the maximum application rate to 2,000 gallons per acre per year, require setbacks for wells and surface waters, prohibit land application in the 100-year floodplain, prohibit land application to soils with shallow groundwater. To reduce the occurrence of nuisance odors, land application of dairy

waste is prohibited within 750 feet from an occupied residence or business structure, school (including associated recreational areas), permanent structure containing a place of worship, or public park.

New §321.411, *Notification*, establishes requirements for the person or entity applying dairy waste or the owner of the land application areas to notify the appropriate TCEQ Regional Office upon land application of dairy waste. The adopted rule requires oral notification to occur within 24 hours of application and written notification within 14 days. The adopted rule includes information to assist landowners with identifying the regional office contact information. The adopted rule requires the notification to include the date, time, location, volume, and the applicable emergency condition.

New §321.413, *Duration of Authorization*, limits the authorization for land application of dairy waste under new Subchapter Q from the first day of the emergency condition(s) to a time period of seven (7) calendar days beyond the end of the emergency condition. Seven calendar days allows sufficient time to manage dairy waste after the emergency condition ends, however in the event that additional time is needed, the executive director can extend the duration of the authorization.

Final Regulatory Impact Determination

TCEQ reviewed the adopted rulemaking in consideration of the regulatory analysis of major environmental rules required by Texas Government Code (TGC) §2001.0225 and determined that the rulemaking is not subject to §2001.0225(a) because it does not

meet the definition of a "Major environmental rule" as defined in §2001.0225(g)(3). The following is a summary of that review.

Section 2001.0225 applies to a "Major environmental rule" adopted by a state agency, the result of which is to exceed standards set by federal law, exceed express requirements of state law, exceed requirements of delegation agreements between the state and the federal government to implement a state and federal program, or adopt a rule solely under the general powers of the agency instead of under a specific state law. A "Major environmental rule" is a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector or the state.

The Texas Legislature enacted HB 692, amending TWC, Chapter 26 (Water Quality Control), Subchapter B (General Water Quality Power and Duties), and THSC, Chapter 361 (the Solid Waste Disposal Act), Subchapter C (Permits) by adding §26.0481 to the TWC and §361.1215 of the THSC, which provides an additional regulatory and legal method for dairy AFOs to dispose of dairy waste, which HB 692 defines as milk, milk by-products, or milk processing waste that is spilled, spoiled, adulterated, unmarketable, stranded, or otherwise unfit for human consumption produced by a dairy operation or at a CAFO, as applicable.

HB 692 required TCEQ to adopt new TCEQ rules to implement HB 692's provisions.

HB 692 grants TCEQ rulemaking authority to create an authorization by rule for land application of dairy waste, and to adopt new rules allowing the disposal of dairy waste from a CAFO into an RCS, including a lagoon or playa, and authorize land application by irrigation associated with that disposal.

As the Bill Analysis from the Environmental Regulation Committee of the Texas House of Representatives makes clear, the 88th Texas Legislature enacted HB 692 with the aim of providing Texas dairies with another disposal method for unused milk or dairy waste. In Texas, milk or dairy waste is disposed of in a disposal well, of which there are only two locations in Texas for dairy waste. According to the Texas Association of Dairymen, the average cost to dispose a truckload of milk, about 50,000 pounds, is around \$3,000, which is a costly burden for dairy operators in Texas. Whereas, land application of dairy waste has proven to be an effective fertilizer, and based on current research, milk itself can improve soil health, if applied properly. This is due to milk's ability to provide nutrients to plants and stimulate the growth of beneficial fungi by supplying sugar. HB 692 addressed these issues by amending TWC and THSC to provide for the authorization for certain land applications and disposal of dairy waste.

HB 692 requires TCEQ to issue both an authorization by rule for land application of dairy waste, that minimizes the risk of water quality impairment caused by the land application, prescribes the conditions under which an authorization is issued, such as

the duration of the authorization, the location of the land application area or unit, the maximum quantity or application rate of dairy waste that may be applied or disposed of under the authorization, the suggested agronomic application rate for the dairy waste, and best management practices (BMPs) for the handling and disposal of dairy waste.

HB 692 requires TCEQ, to the extent permitted by federal law, to adopt rules allowing the storage of dairy waste by an AFO into an RCS, including a lagoon or playa, and the land application by irrigation associated with that disposal. The rules must require BMPs and other conditions to ensure that the disposal of dairy waste into the RCS or its associated land application does not impair water quality.

In order to implement the provisions of HB 692, TCEQ adopts the addition of new §321.48 and §321.49 to the existing 30 TAC Chapter 321, Subchapter B rules allowing dairy operations to land apply dairy waste; and storage of dairy waste in an RCS, including a lagoon or playa, and irrigate dairy waste from the RCS to land application areas. TCEQ also adopts the addition of new 321.401, §321.403, §321.405, §321.407, §321.409, §321.411, and §321.413 under new 30 TAC Chapter 321, Subchapter Q, allowing entities to directly land apply dairy waste, under emergency conditions, on agricultural land that is not associated with an animal feeding operation or any other TCEQ authorization.

Therefore, the specific intent of the adopted rulemaking is related to expanding the existing CAFO Rules with regulatory options for disposal of dairy waste, as defined in HB 692.

The adopted rules are intended to protect the environment or reduce risks to human health from environmental exposure. However, the adopted rulemaking will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, or jobs; nor would the adopted rulemaking adversely affect in a material way the environment, or the public health and safety of the state or a sector of the state. Therefore, the adopted rulemaking does not fit the TGC, §2001.0225 definition of "Major environmental rule."

Even if this rulemaking was a "Major environmental rule," this rulemaking meets none of the criteria in §2001.0225 for the requirement to prepare a full Regulatory Impact Analysis. First, this rulemaking is not governed by federal law. Second, it does not exceed state law but rather extends state law and TCEQ rules to adopted and effective state laws. Third, does not come under a delegation agreement or contract with a federal program, and finally, is not being adopted under TCEQ's general rulemaking authority. This rulemaking is being adopted under a specific state statute enacted in HB 692 of the 2023 Texas legislative session and implements existing state law. Because this adoption does not constitute a major environmental rule, a regulatory impact analysis is not required.

Therefore, the commission does not adopt the rule solely under the commission's general powers. The commission invited public comment on the draft regulatory impact analysis determination. No comments were received on the draft regulatory impact analysis determination.

Takings Impact Assessment

TCEQ evaluated the adopted rulemaking and performed an analysis of whether it constitutes a taking under TGC, Chapter 2007. The following is a summary of that analysis.

Under TGC, §2007.002(5), "taking" means a governmental action that affects private real property, in whole or in part or temporarily or permanently, in a manner that requires the governmental entity to compensate the private real property owner as provided by the Fifth and Fourteenth Amendments to the United States Constitution or Section 17 or 19, Article I, Texas Constitution; or a governmental action that affects an owner's private real property that is the subject of the governmental action, in whole or in part or temporarily or permanently, in a manner that restricts or limits the owner's right to the property that would otherwise exist in the absence of the governmental action and is the producing cause of a reduction of at least 25% in the market value of the affected private real property, determined by comparing the market value of the property as if governmental action is not in effect and the market value of the property determined as if the governmental action is in effect.

The specific purpose of the adopted rulemaking is to implement the legislative amendments to the THSC and the TWC in HB 692 by amending TCEQ's CAFO Rules to expand the existing CAFO Rules with regulatory options for disposal of dairy waste, as defined in HB 692. The adopted rulemaking will substantially advance this stated purpose by adopting new rule language that provides for the authorization for certain land applications and disposal of dairy waste.

Promulgation and enforcement of the adopted rules will not be a statutory or constitutional taking of private real property because, as the commission's analysis indicates, TCG, Chapter 2007 does not apply to these adopted rules because these rules do not impact private real property in a manner that would require compensation to private real property owners under the United States Constitution or the Texas Constitution. Specifically, the adopted rulemaking does not apply to or affect any landowner's rights in any private real property because it does not burden (constitutionally), restrict, or limit any landowner's right to real property and reduce any property's value by 25 percent or more beyond that which would otherwise exist in the absence of the regulations. The primary purpose of the adopted rules is to implement HB 692 by providing for the authorization for certain land applications and disposal of dairy waste. The adopted rulemaking is reasonably taken to fulfill requirements of state law. Therefore, the adopted rulemaking would not cause a taking under TGC, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found that the adoption is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 et seq., and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the adopted rules in accordance with Coastal Coordination Act Implementation Rules, 31 TAC §29.22 and found the adopted rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the adopted rulemaking includes protecting, preserving, restoring, and enhancing the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs); and ensuring sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applicable to the adopted rules include that discharges must comply with water quality-based effluent limits; and that discharges which increase pollutant loadings to coastal waters must not impair designated uses of coastal waters and must not significantly degrade coastal water quality, unless necessary for important economic or social development.

The adopted rulemaking is consistent with the above goals and policies by requiring dairy waste disposal activities to be conducted in a manner that is protective of water quality and prohibits the discharge of dairy waste into water in the state.

Promulgation and enforcement of the rules would not violate or exceed any standards identified in the applicable CMP goals and policies because the adopted rules would be consistent with these CMP goals and policies, and the rule would not create or have a direct or significant adverse effect on any CNRAs.

The commission invited public comment on the consistency with the CMP during the public comment period. No comments were received regarding the CMP.

Public comment

At the February 13, 2025 Agenda, the commission directed the executive director to specifically invite public comment on the proposal to authorize the dairy waste management activities only under emergency conditions, without THSC, §361.1215 and TWC, §26.0481 expressly stating that they apply only in such situations. The proposed rule package was revised accordingly prior to publication in the Texas Register.

The commission offered a public hearing on March 31, 2025. The 30-day comment period closed on March 31, 2025. No public comments were received by the commission.

SUBCHAPTER B: CONCENTRATED ANIMAL FEEDING OPERATIONS

§321.48 and §321.49

Statutory Authority

The new sections are adopted under the Texas Water Code (TWC) and the Texas Health and Safety Code (THSC). TWC, §5.013 establishes the general jurisdiction of the commission, while TWC, §5.102 provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC, §5.103. TWC, §5.103 requires the commission to adopt any rule necessary to carry out its powers and duties under the TWC and other laws of the state. TWC, §5.120 requires the commission to administer the law so as to promote judicious use and maximum conservation and protection of the environment and the natural resources of the state. TWC, §26.121, prohibits the unlawful discharge of pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission. TWC, §26.0481 provides the commission with authority to adopt rules to allow the disposal of dairy waste from a CAFO into a control or retention facility, including a lagoon or playa; and the land application by irrigation associated with that disposal.

THSC, §361.1215 provides the commission with authority to issue an authorization by rule for land application of dairy waste and to adopt rules governing that land application.

The adopted new sections implement House Bill 692, 88th Texas Legislature (2023), TWC, §§5.013, 5.102, 5.103, 5.120, 26.121, 26.0481, and THSC, §361.1215.

§321.48. Land Application of Dairy Waste

(a) Definitions. The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise:

(1) Dairy Operation--An Animal Feeding Operation (AFO) confining cattle that have been or may be used for production of milk, or otherwise associated with a dairy, including cows, calves, and bulls.

(2) Dairy Waste--Milk, milk by-products, or milk processing waste that is spilled, spoiled, adulterated, unmarketable, stranded, or otherwise unfit for human consumption produced by a dairy operation. For the purposes of this rule, dairy waste does not include solid or semi-solid milk products.

(3) Emergency Conditions - Instances where dairy waste is generated at any point along the dairy supply chain due to a reasonably unforeseeable situation, including but not limited to:

(A) fire, flood, earthquake, hurricane, tornado, or wind, rain, ice, or snowstorm;

(B) power failure, transportation failure, mechanical failure, or

interruption of communication facilities;

(C) epidemic;

(D) riot, civil disturbance, enemy attack, or other actual or threatened act of lawlessness or violence; or

(E) any other situation deemed by the executive director to qualify as an emergency.

(b) Duration of Authorization. Authorization to land apply dairy waste on LMUs expires seven (7) calendar days after the emergency condition ends, unless an alternative duration for the authorization is granted by the executive director.

(c) Purpose. This section provides authorization to a dairy operation to directly land apply dairy waste, including dairy waste received from a third-party, under emergency conditions to land that is under the control of a permitted CAFO or unpermitted AFO.

(d) Applicability. This section applies to the owner or operator of a dairy operation that generates or accepts third-party dairy waste that is land applied under emergency conditions.

(e) General Requirements. The following requirements apply to land application of dairy waste:

(1) Land application of dairy waste must comply with the requirements of §321.40 of this title (relating to Concentrated Animal Feeding Operation (CAFO) Land Application Requirements) for a CAFO or §§321.47(f), (h), and (i) of this title (relating to Land Application, Nutrient Utilization Plans, and Recordkeeping Requirements, respectively) for an AFO.

(2) Discharge of dairy waste into water in the state from a land management unit (LMU) is prohibited.

(3) Land application practices shall be maintained to minimize ponding or puddling of the dairy waste on the site and prevent the occurrence of nuisance conditions.

(4) Land application of dairy waste shall not occur when the ground is frozen or saturated or during rainfall events.

(5) Dairy waste shall not be land applied within the well buffers identified in §321.38(b) of this title (relating to Control Facility Design Requirements Applicable to Concentrated Animal Feeding Operations (CAFOs)).

(6) Land application of dairy waste shall not occur within 100 feet of any surface water in the state.

(7) Land application of dairy waste shall not occur within a vegetative buffer strip required by §321.40(h) of this title.

(8) Dairy waste shall not be land applied within the 100-year floodplain.

(9) Dairy waste shall not be land applied to soils with shallow, perched or seasonal water tables.

(10) Dairy waste may only be applied to fields that are vegetated with actively growing crops, hay or vegetation, or if to a fallow field, the dairy waste shall be incorporated into the soils within 48 hours of land application.

(11) Dairy waste application shall be limited to a maximum of 2,000 gallons per acre per year.

(12) Dairy waste shall be applied evenly to the soils.

(13) Dairy waste shall not be land applied within 750 feet from an occupied residence or business structure, school (including associated recreational areas), permanent structure containing a place of worship, or public park.

(14) There shall be no land application of dairy waste to an LMU if the LMU is required to have a Nutrient Utilization Plan (NUP) per §321.40(k)(3) of this title.

(15) There shall be no land application of dairy waste to an LMU that has or reaches a critical soil test phosphorus (P) level of greater than or equal to 500 ppm, with a P – Index rating of "High" or "Very High".

(f) Notification Requirements. The dairy operator shall notify the appropriate TCEQ Regional Office orally within 24 hours of land application of dairy waste or by the next business day, and in writing within 14 days of the land application of the dairy waste. Written notification may be on paper, electronic mail, or other electronic method as prescribed by the executive director. The notification shall include the following information:

(1) the location of the land where the dairy waste was land applied, including the address of the area, latitude and longitude, or a site map;

(2) the applicable emergency condition;

(3) the date that dairy waste was land applied;

(4) the volume (gallons, or acre-feet) of dairy waste land applied;

(5) proof of authorization of the use of the field for land application of dairy waste if third-party land was used;

(6) the duration of the emergency condition and if additional time will be needed to complete the land application; and

(7) a certification signed by the dairy operator that the requirements of this subchapter were complied with during the land application of dairy waste.

(g) Recordkeeping Requirements. A dairy owner or operator that land applies dairy waste shall include the following information in the Pollution Prevention Plan (PPP) required in §321.46(d) of this title:

(1) a log of all dairy waste land applied at the AFO or CAFO updated at least monthly. Such records must include the following information:

(i) date of dairy waste application to each LMU;

(ii) location of the specific LMU and the volume (gallon, or acrefeet) applied during each application event;

(iii) acreage of each individual crop on which dairy waste is

applied; and

(iv) weather conditions (such as the temperature, precipitation, and cloud cover) during the land application and 24 hours before and after the land application;

(2) documentation describing any discharge of dairy waste into water in the state including the date, time, volume of overflow (gallons, or acre-feet), a copy of the notification(s) provided to the regional office, and sample analysis results associated with the discharge; and

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

(h) Discharge Notification. Discharge notification requirements in §§321.44(a)(1) through (6) of this title shall apply to the discharge of dairy waste.

(i) Discharge Monitoring. The dairy operator shall sample all discharges of dairy waste to surface water in the state and comply with the discharge monitoring in §321.44(b) of this title.

(j) Annual Reporting. The dairy operator land applying dairy waste shall include the information required by §321.48(g) in the annual report as indicated in §321.36(g) of this title. Dairy operators that are not authorized by permit, and therefore not required to submit an annual report, must mail the following information to the appropriate TCEQ Regional Office that is servicing the area where the dairy operation is located by March 31 of each year:

(1) estimated total volume of dairy waste (in gallons) generated during the reporting period; and

(2) total volume of dairy waste (gallons, or acre-feet) land applied during the reporting period.

§321.49. Storage of Dairy Waste in a Retention Control Structure or Playa at an Animal Feeding Operation

(a) Purpose. This section provides authorization to a dairy operation to store dairy waste during emergency conditions in a retention control structure (RCS) or playa and subsequently land apply the dairy waste for beneficial use.

(b) Applicability. This section applies to an owner or operator of a dairy operation that stores dairy waste in an RCS or playa that meets the requirements of §321.41 of this title (relating to Special Requirements for Discharges to a Playa).

(c) Duration of Authorization. Authorization to store dairy waste in a retention control structure(s) expires seven (7) calendar days after the emergency condition ends, unless an alternative duration for the authorization is granted by the executive director.

(d) Discharge Restrictions.

(1) There shall be no discharge or disposal of dairy waste from a dairy operation into or adjacent to water in the state, except in accordance with this section. Dairy waste generated by a dairy operation under this subchapter shall be retained and utilized in an appropriate and beneficial manner as provided by this section.

(2) The storage of dairy waste in an RCS is subject to the effluent limitations in 30 TAC §321.37 and the RCS design requirements in 30 TAC §321.38 and 30 TAC §321.42(c) of this title (relating to Effluent Limitations for Concentrated Animal Feeding Operation (CAFO) Production Areas, Control Facility Design Requirements Applicable to Concentrated Animal Feeding Operations, and

Requirements Applicable to the Major Sole-Source Impairment Zone to maintain a margin of safety in the RCS).

(e) Recordkeeping Requirements. A dairy owner or operator that stores dairy waste in an RCS under emergency conditions shall include a log of all dairy waste received and stored at the AFO or CAFO, updated at least monthly, in the Pollution Prevention Plan (PPP) required in §321.46(d) of this title.

(f) General Requirements.

(1) Storage of dairy waste in a playa shall comply with §321.41 of this title.

(2) A dairy operation using an RCS for storage of dairy waste shall ensure that the required capacity in the RCS is available to contain rainfall and rainfall runoff from the design rainfall event, and the margin of safety for CAFOs located in a major sole-source impairment zone.

(3) The operator shall not store dairy waste in an RCS that is in danger of imminent overflow from chronic or catastrophic rainfall or catastrophic conditions.

(4) The dairy operator shall notify the appropriate TCEQ Regional Office orally within 24 hours, or by the next business day, of storing dairy waste in an RCS.The following information shall be provided during the oral notification:

(A) the dairy's authorization status: if the dairy is permitted or not permitted and, if permitted, the permit number;

(B) the name and address of the owner and/or operator;

(C) the name and location of the dairy;

(D) the site-specific emergency condition(s); and

(E) the duration of the emergency conditions and if additional time will be needed to manage dairy waste either by land application, placement in an RCS, or transfer to another dairy.

(5) Written notification. The dairy operator shall provide written notification to the appropriate TCEQ Regional Office within 14 days of storing dairy waste in an RCS. Written notification may be on paper, electronic mail, or other electronic method as prescribed by the executive director. The following information shall be provided, in addition to the information required for oral notification, on a form that is prescribed by the executive director:

(A) location and name of the RCS that was used to store the dairy

waste, including the latitude and longitude;

(B) the date(s) that the dairy waste was put into an RCS;

(C) the volume of dairy waste (gallons, or acre-feet) that was stored

in an RCS;

(D) if there was any discharge of dairy waste from the RCSs, and the estimated volume of the discharge (gallons, or acre-feet); and

(E) a USGS topographical Map and a Site and Runoff Control Map identifying where the dairy waste was stored.

(g) Dairy Waste Transfer. A dairy operator may transfer dairy waste to another dairy site for land application or storage in an RCS to use for irrigation when needed.

(1) The owner or operator generating the dairy waste shall keep a record of the date and volume of dairy waste (gallons, or acre-feet) that is transferred to another dairy.

(2) The owner or operator generating the dairy waste shall provide the laboratory report for total nitrogen, total phosphorus, and total potassium content of the dairy waste to the receiver of the dairy waste. If the laboratory report is not available, the book value of dairy waste from the Texas A & M AgriLife Extension Services shall be used in lieu of the laboratory report.

(3) The owner or operator generating the dairy waste shall keep records of the name(s) and address(s) of the recipient(s) of the dairy waste.

(h) Dairy Waste Received. A dairy operator that receives dairy waste shall comply with:

(1) §321.48 of this title (relating to Land Application of Dairy Waste) if dairy waste is land applied, or

(2) the requirements of this section if dairy waste is stored in an RCS.

(i) Annual Reporting. The dairy operator that places dairy waste in an RCS under emergency conditions shall include the information required by §321.49(e) in the annual report required by §321.36(g) of this title. Dairy operators that are not authorized by permit, and therefore not required to submit an annual report, must mail the following information to the appropriate TCEQ Regional Office that is servicing the area where the dairy operation is located by March 31 of each year:

(1) estimated total volume of dairy waste (in gallons) stored during the

reporting period; and

(2) total volume of dairy waste (gallons, or acre-feet) land applied during

the reporting period.

SUBCHAPTER Q: LAND APPLICATION OF DAIRY WASTE AUTHORITY §321.401, §321.403, §321.405, §321.407, §321.409, §321.411, and §321.413 Statutory Authority

The new sections are adopted under the Texas Water Code (TWC) and the Texas Health and Safety Code (THSC). TWC, §5.013 establishes the general jurisdiction of the commission, while TWC, §5.102 provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC, §5.103. TWC, §5.103 requires the commission to adopt any rule necessary to carry out its powers and duties under the TWC and other laws of the state. TWC, §5.120 requires the commission to administer the law so as to promote judicious use and maximum conservation and protection of the environment and the natural resources of the state. TWC, §26.121, prohibits the unlawful discharge of pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission. TWC, §26.0481 provides the commission with authority to adopt rules to allow the disposal of dairy waste from a CAFO into a control or retention facility, including a lagoon or playa; and the land application by irrigation associated with that disposal.

THSC, §361.1215 provides the commission with authority to issue an authorization by rule for land application of dairy waste and to adopt rules governing that land application.

The adopted new sections implement House Bill 692, 88th Texas Legislature (2023), TWC, §§5.013, 5.102, 5.103, 5.120, 26.121, 26.0481, and THSC, §361.1215.

§321.401. Purpose and Applicability

This subchapter authorizes by rule direct land application of dairy waste, under emergency conditions, on agricultural land that is not associated with an animal feeding operation or any other TCEQ authorization. The requirements of this subchapter apply to the entity or entities land applying the dairy waste and the owners of the land application area.

§321.403. Dairy Waste Management Alternatives

A person or entity that needs to manage dairy waste under emergency conditions may use the options below:

(1) land application of dairy waste on agricultural land in accordance with this subchapter;

(2) retention and land application of dairy waste at an animal feeding operation in accordance with 30 TAC §§ 321.48 and 321.49 of this title;

(3) direct land application to agricultural lands authorized under a Texas Pollutant Discharge Elimination System permit or Texas Land Application permit amended to include dairy waste management in their permit;

(4) disposal at a permitted solid waste landfill;

(5) disposal via a permitted injection well;

(6) hauling or discharging to a permitted domestic wastewater collection system with written consent from the plant operator or owner;

(7) use as animal feed in accordance with Texas Agriculture Code,

Chapter 141 (relating to Commercial Feed); or

(8) other beneficial uses approved by the executive director.

§321.405. Definitions

The following words and terms, when used in this subchapter, have the following meanings.

(1) Agronomic rate - The dairy waste application rate designed:

(A) to provide the amount of nitrogen needed by the crop or vegetation grown on the land; and

(B) to minimize the amount of nitrogen in the dairy waste that passes below the root zone of the crop or vegetation grown on the land.

(2) Agricultural land – Cropland, grassland, rangeland, pasture, or other specific land areas that are solely devoted to being used for growing crops, hay, or forage.

(3) Dairy Operation - Any entity involved in milk production, collection, transportation, receiving, transfer, or processing.

(4) Dairy Waste - Milk, milk by-products, or milk processing waste that is spilled, spoiled, adulterated, unmarketable, stranded, or otherwise unfit for human consumption produced by a dairy operation. For the purposes of this rule, dairy waste does not include solid or semi-solid milk products.

(5) Emergency Conditions - Instances where dairy waste is generated at any point along the dairy supply chain due to a reasonably unforeseeable situation, including but not limited to:

(A) fire, flood, earthquake, hurricane, tornado, or wind, rain, ice, or

snowstorm;

(B) power failure, transportation failure, mechanical failure, or interruption of communication facilities;

(C) epidemic;

(D) riot, civil disturbance, enemy attack, or other actual or

threatened act of lawlessness or violence; or

(E) any other situation deemed by the executive director to qualify as an emergency.

(6) Land application--The act of applying dairy waste to agricultural land for beneficial use by crops, hay, or forage. Beneficial use includes the addition of nutrients from dairy waste, such as nitrogen and phosphorous, and the water content of dairy waste used to enhance moisture content of the soil.

(7) 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 America, 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.

§321.407. Protection of Surface Water and Groundwater Quality

(a) The discharge of dairy waste into water in the state, including surface waters and groundwater, is prohibited.

(b) Land application of dairy waste shall not contaminate groundwater.

§321.409. General Requirements

The following requirements apply to land application of dairy waste on agricultural land during emergency conditions. Property owner consent is required for all land application activities.

(1) Dairy waste shall not be land applied within 100-feet of any surface water in the state.

(2) Dairy waste shall not be land applied within 500 feet of a public drinking water well or within 150 feet of any other water well.

(3) Dairy waste shall not be land applied within 750 feet of an occupied residence or business structure, school (including associated recreational areas), permanent structure containing a place of worship, or public park.

(4) Dairy waste shall not be land applied within the 100-year floodplain.

(5) Dairy waste shall not be land applied when the ground is frozen or saturated or during rainfall events.

(6) Dairy waste may only be applied to fields that are vegetated with actively growing crops, hay, or forage, or if to a fallow field, the dairy waste shall be incorporated into the soils within 48 hours of land application.

(7) Dairy waste application shall be limited to a maximum of 2,000 gallons per acre per year. For a full tanker truck load of 6,000 to 8,000 gallons, the contents must be applied over a minimum of three to four acres of land to comply with this requirement.

(8) Land application practices shall be maintained to minimize ponding or puddling of the dairy waste on the site and prevent the occurrence of nuisance conditions.

(9) Dairy waste must be conducive to land application (i.e., in a form that is spreadable and can be incorporated into the soil to avoid piling).

(10) Dairy waste shall not be land applied to soils with shallow, perched, or seasonal water tables.

§321.411. Notification

(a) The person or entity applying dairy waste, or the owner of the land application areas, shall notify the appropriate TCEQ Regional Office upon land application of dairy waste. Oral notification must occur within 24 hours of land application and written notification within 14 days. Contact information for TCEQ Regional Offices is available in the TCEQ publication number M-070 titled "Area, Region, and Watermaster Offices" available on the TCEQ website at: www.tceq.texas.gov/publications.

(b) The notification must include the following information:

(1) the location where the dairy waste was land applied including the address, latitude and longitude, or a map;

(2) the applicable emergency condition;

(3) the date and time that dairy waste was land applied;

(4) the volume (gallons) of dairy waste that was land applied; and

(5) the duration of the emergency conditions and if additional time will be needed to complete the land application on agricultural land.

§321.413. Duration of Authorization

Authorization to land apply dairy waste on agricultural land expires seven (7) calendar days after the emergency condition ends, unless an alternative duration for the authorization is granted by the executive director.