The Texas Commission on Environmental Quality (commission) proposes amendments to §§321.32, 321.35, 321.39, 321.55, 321.252, 321.255, 321.271, and 321.274.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

Senate Bill (SB) 405, 77th Legislature, established the Texas Board of Professional Geoscientists and the regulation of professional geoscientists. The Geoscience Practice Act (the Act) requires that a person may not take responsible charge of a geoscientific report or a geoscientific portion of a report required by state agency rule unless the person is licensed through the Texas Board of Professional Geoscientists. The primary purpose of the proposed amendments is to establish regulations for the public practice of geoscience in conformance with the Act by requiring a person who prepares and submits geoscientific information to the commission to be a licensed professional geoscientist. The Act also allows certain specified engineers to publicly practice geoscience in conformance with the Act. According to the bill analysis prepared at the time of passage, the ultimate purpose of the Act was public safety through the public registration of the practice of geoscience.

SECTION BY SECTION DISCUSSION

Throughout the sections, administrative changes are proposed in accordance with *Texas Register* requirements and to be consistent with other agency rules.

Proposed §321.32, Definitions, amends the introductory paragraph by deleting the word “shall” and the phrase “unless the context clearly indicates otherwise.” The definition of licensed professional

geoscientist is proposed to be added and the definition of qualified groundwater scientist is proposed to be deleted, and existing paragraphs (20) - (33) are proposed to be renumbered accordingly.

Proposed §321.35(c), Procedures for Making Application for Registration, makes minor grammatical corrections, substituting "that" for "which" and removing "such." In proposed subsection (c)(8), substitutes "shall" for "must" and requires that documentation of liner certifications be prepared, signed, sealed, and dated either by a licensed professional engineer or a licensed professional geoscientist. In subsection (c)(10), the commission proposes that a recharge feature certification may be made by a Natural Resources Conservation Service (NRCS) engineer, a licensed professional engineer, or a licensed professional geoscientist (rather than a qualified groundwater scientist). In subsection (c)(10)(G), licensed professional geoscientist is proposed to be substituted for qualified groundwater scientist, and a minor grammatical error is proposed to be corrected. In subsection (c)(11), the commission proposes to replace qualified groundwater scientist with licensed professional geoscientist; to correct two minor grammatical errors; and to break the final sentence into two sentences for readability. In subsection (c)(11)(B), the commission proposes to require that the groundwater monitoring plan be prepared, certified, signed, sealed, and dated by a licensed professional geoscientist and to substitute "must" for "shall." Cross-references in §321.35(b), (d), (e), and (h) are proposed to be updated.

Proposed §321.39(f), Pollution Prevention Plans, substitutes "must" for "shall." The commission proposes to amend subsection (f)(16) by making an antecedent noun agree in number with its precedent nouns; and substituting "that" for "which." In subsection (f)(16)(A), a minor grammatical correction

in the choice of indefinite article is proposed; and licensed professional geoscientist is proposed to replace qualified groundwater scientist as one of the three people who may document no significant leakage from a retention structure. In subsection (f)(16)(B), the commission proposes to specify what the documentation must include or show; to correct a minor grammatical error; and to replace licensed professional geoscientist for qualified groundwater scientist as one of the three people who may make the written determination. In subsection (f)(17), the commission proposes to substitute "must" for "shall"; substitute "that" for "which"; correct a minor grammatical error; replace licensed professional geoscientist for qualified groundwater scientist as one of the three people who can make a site-specific assessment; make an antecedent noun agree in number with its precedent noun; and use the correct noun "equivalent" meaning "equal" rather than "equivalency," which means "a condition of equality." In subsection (f)(18), the commission proposes to make a precedent noun agree in number with its antecedent noun; correct a minor grammatical error; and replace licensed professional geoscientist for qualified groundwater scientist as one of the three people who can do a site evaluation every five years.

Proposed §321.55, Protection of Groundwater, substitutes "must" for "shall"; correctly specifies the requirements of paragraphs (1) and (2); and deletes the word "such." In paragraph (2), the commission proposes to substitute "must" for "shall"; delete an unnecessary period; spell out centimeters per second; provide the correct and proper name of the laboratory test to be conducted; and require certification of the pond liner by a licensed professional engineer or a licensed professional geoscientist and that the certification be signed, sealed, and dated by a licensed professional engineer or a licensed professional geoscientist.

Proposed §321.252, Definitions, amends the introduction of the section by adding the word "when"; deleting the word "shall"; and deleting the phrase "unless the context clearly indicates otherwise." The definition of licensed professional geoscientist is proposed to be added as new paragraph (6) and the remaining paragraphs are proposed to be renumbered accordingly. A corrected reference to Chapter 213 instead of Chapter 313 is proposed in renumbered paragraph (10). Formatting changes are proposed throughout this section to be consistent with other agency rules.

Proposed §321.255(c), Requirements for Containment of Wastes and Pond(s), substitutes "licensed" for "registered" professional engineer; includes a licensed professional geoscientist among the persons who can certify a pond lining; and substitutes "using" for "utilization of." Proposed subsection (c) also requires that the certification be signed, sealed, and dated by a licensed professional engineer or licensed professional geoscientist. Formatting changes are proposed throughout this section to be consistent with other agency rules. A cross-reference is proposed to be corrected in subsection (e).

Proposed §321.271, Definitions, amends the introduction of the section by deleting the word "shall" and the phrase "unless the context clearly indicates otherwise." The definition of licensed professional geoscientist is proposed to be added as new paragraph (14) and the remaining paragraphs are proposed to be renumbered accordingly. Administrative changes, which include formatting, grammatical, and cross-reference corrections, are proposed throughout the section to conform with *Texas Register* and agency requirements.

Proposed §321.274, Ground-water Protection, amends the title to Groundwater Protection, to reflect the accepted usage of "groundwater" as a single, unhyphenated word. Subsection (a) is proposed to be amended to substitute "that" for "which"; substitute "must" for "shall"; and spell out milligrams per liter. The commission proposes to amend subsection (a)(1) to substitute "must" for "shall"; eliminate a superfluous grammatical construction; and reflect the accepted usage of "groundwater" as a single, unhyphenated word. Subsection (a)(1)(E) is proposed to be amended to require that the certification be signed, sealed, and dated by a licensed professional engineer or licensed professional geoscientist; substitute "licensed" for "registered" professional engineer; include a licensed professional geoscientist among the persons who can certify a pond lining; and substitute "using" for "utilization of." The commission proposes to amend §321.274(b) by substituting "using" for "utilizing"; substituting "that" for "which"; specifying the noun antecedent of the demonstrative pronoun; and substituting "must" for "shall." Subsection (b)(1) is proposed to be amended to substitute "must" for "shall"; eliminate a superfluous grammatical construction; and reflect the accepted usage of "groundwater" as a single, unhyphenated word. The commission proposes to amend subsection (b)(1)(D) to require that the certification be signed, sealed, and dated by a licensed professional engineer or licensed professional geoscientist; substitue "licensed" for "registered" professional engineer; include licensed professional geoscientist among the persons who can certify a pond lining; and substitute "using" for "utilization of." Formatting changes are proposed throughout this section to be consistent with other agency rules.

FISCAL NOTE

Doretta Conrad, Analyst in the Budget and Planning Division, has determined that, for the first five-year period the proposed rules are in effect, there will be no significant fiscal implications for the agency or any other unit of state government as a result of administration or enforcement of the proposed rules. There will be no fiscal impact to the agency; however, there may be fiscal implications to the agency if the agency elects to reimburse staff for the annual renewal fees. The fees associated with obtaining the professional geoscientist license is $200 to cover the application and first-year license, and $150 per year after the first year.

Ms. Conrad also determined that for each of the first five years the proposed rules are in effect, the public benefit anticipated from the enforcement of and compliance with the proposed rules will be potentially improved environmental performance by persons regulated by the commission. The proposed rules might impact other state agencies or local governments with staff geologists who need to become licensed under these rules. No significant fiscal implications are anticipated for any individual or business due to implementation of the proposed rules. Additionally, no significant fiscal implications are anticipated for any small or micro-business due to implementation of the proposed rules. The commission has determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the rulemaking is not subject to §2001.0225 because it does not meet the criteria for a "major environmental rule" as defined in that statute.

A "major environmental rule" means 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 of the state.

The specific intent of the proposed rules is to establish regulations allowing for the public practice of geoscience in agency procedures in conformance with the Act. The Act requires that a person may not take responsible charge of a geoscientific report or a geoscientific portion of a report required by a state agency rule unless the person is licensed through the Texas Board of Professional Geoscientists. The proposed rules are not specifically intended to protect the environment or reduce risks to human health. The proposed rules are intended to establish procedures to require that specific reports and necessary data submitted to the commission be produced, signed, sealed, and dated by licensed professional geoscientists who have obtained their licenses through the Texas Board of Professional Geoscientists. Therefore, it is not anticipated that the proposed rules will 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 of the state. The commission concludes that these proposed rules do not meet the definition of major environmental rule.

Furthermore, even if the proposed rulemaking did meet the definition of a major environmental rule, the amendments are not subject to Texas Government Code, §2001.0225, because they do not accomplish any of the four results specified in §2001.0225(a). Section 2001.0225(a) applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

In this case, the proposed amendments to Chapter 321 do not meet any of these requirements. First, there are no federal standards that these rules would exceed. Second, the proposed rules do not exceed an express requirement of state law. Third, there is no delegation agreement that would be exceeded by these proposed rules. Fourth, the commission proposes these rules to allow for the public practice of geoscience in agency procedures in conformance with the Act. Therefore, the commission does not propose the adoption of the rules solely under the commission's general powers.

The commission invites public comment on the draft regulatory impact analysis determination.

TAKINGS IMPACT ASSESSMENT

The commission evaluated these proposed rules and performed a preliminary assessment of whether these proposed rules constitute a takings under Texas Government Code, Chapter 2007. The specific

intent of the proposed rules is to establish regulations allowing for the public practice of geoscience in agency procedures in conformance with the Act. The proposed rules would substantially advance this stated purpose by requiring that specific reports and necessary data submitted to the commission be produced, signed, sealed, and dated by licensed professional geoscientists who have obtained their licenses through the Texas Board of Professional Geoscientists.

Promulgation and enforcement of these proposed rules would be neither a statutory nor a constitutional taking of private real property. Specifically, the proposed rules do not affect a landowner's rights in private real property by burdening private real property, nor restricting or limiting a landowner's right to property, or reducing the value of property by 25% or more beyond that which would otherwise exist in the absence of the proposed rulemaking. These rules simply require that specific portions of applications or necessary data submitted to the commission be produced, signed, sealed, and dated by a qualified professional individual who has demonstrated his or her qualifications by obtaining a license to engage in the public practice of geoscience from the Texas Board of Professional Geoscientists. These proposed rules do not affect any private real property.

There are no burdens imposed on private real property, and the benefits to society are better applications for environmental permits based upon reliable reports and data submitted by qualified licensed professional geoscientists.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission has reviewed the proposed rulemaking and found that the proposal is a rulemaking identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Texas Coastal Management Program (CMP), or will affect an action and/or authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6), and will therefore require that applicable goals and policies of the CMP be considered during the rulemaking process. The commission has prepared a consistency determination for the proposed rules under 31 TAC §505.22 and found that the proposed rulemaking is consistent with the applicable CMP goals and policies. The following is a summary of that determination. The CMP goal applicable to the proposed rulemaking is the goal to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas. CMP policies applicable to the proposed rules include the construction and operation of solid waste treatment, storage, and disposal facilities, and the discharge of municipal and industrial wastewater to coastal waters. Promulgation and enforcement of these rules will not violate (exceed) any standards identified in the applicable CMP goals and policies because the proposed rule changes do not modify or alter standards set forth in existing rules, and do not govern or authorize any actions subject to the CMP. The proposed rulemaking would require a person who prepares and submits geoscientific information to the agency to be a licensed professional geoscientist. The commission invites public comment on the consistency determination of the proposed rules.

SUBMITTAL OF COMMENTS

Comments may be submitted to Lola Brown, Office of Environmental Policy, Analysis, and Assessment, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. Comments must be received by 5:00 p.m., June 16, 2003, and should reference Rule Log Number 2001-051C-312-WS. For further information, please contact Michael Bame, Policy and Regulations Division, at (512) 239-5658.

SUBCHAPTER B: CONCENTRATED ANIMAL FEEDING OPERATIONS

§§321.32, 321.35, 321.39

STATUTORY AUTHORITY

The amendments are proposed under Texas Water Code (TWC), §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; and Texas Civil Statutes, Article 3271b, the Act, which authorizes the public practice of geoscience in the State of Texas.

The proposed amendments implement TWC, §5.103 and §5.105, and Texas Civil Statutes, Article 3271b, the Act.

§321.32. Definitions.

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

(1) - (13) (No change.)

(14) **Flushwater waste handling system** - A system in which fresh water [freshwater] or wastewater is recycled or used in transporting waste.

(15) - (19) (No change.)

(20) **Licensed professional geoscientist** - A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

(21) [(20)] **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 structures and waters in the state.

(22) [(21)] **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.

(23) [(22)] **Natural Resources Conservation Service (NRCS)** - An agency of the United States Department of Agriculture which includes the agency formerly known as the Soil Conservation Service (SCS).

(24) [(23)] **New concentrated animal feeding operation (CAFO) [CAFO]** - A CAFO which was not authorized under a rule, order, or permit of the commission in effect on August 19, 1998. For the purposes of §321.48 of this title (relating to Regulation of Certain Dairy Concentrated Animal Feeding Operations (CAFOs)), new CAFO means a proposed CAFO, any part of which is located on property not previously authorized by the state to be operated as a CAFO.

(25) [(24)] **No discharge** - The absence of flow of waste, process generated wastewater, contaminated rainfall runoff, or other wastewater from the premises of the animal feeding operation, except for overflows which result from chronic or catastrophic rainfall events.

(26) [(25)] **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.

(27) [(26)] **Open lot** - Pens or similar confinement areas with dirt, concrete, or other paved or hard surfaces wherein animals 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. 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.

(28) [(27)] **Operator** - The owner or one who is responsible for the management of a concentrated animal feeding operation [CAFO] or an animal feeding operation subject to the provisions of this subchapter.

(29) [(28)] **Permanent odor sources** - Those odor sources which 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 facilities, 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 application areas.

(30) [(29)] **Permittee** - Any person issued or covered by an individual permit or order, permit-by-rule, or granted authorization under the requirements of this subchapter.

(31) [(30)] **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.

(32) [(31)] **Process wastewater** - Any process generated wastewater directly or indirectly used in the operation of a concentrated animal feeding operation [CAFO] (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), and precipitation which comes into contact with any manure or litter, bedding, or any other 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).

(33) [(32)] **Process generated wastewater** - Any water directly or indirectly used in the operation of a concentrated animal feeding operation [CAFO] (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) which is produced as wastewater.

(34) [(33)] **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.

[(34) **Qualified groundwater scientist** - A scientist or engineer who has received a baccalaureate or post-graduate degree in natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by state registration, professional certification, or completion of accredited university programs that enable that individual to make sound professional judgements regarding groundwater monitoring, contamination fate and transport, and corrective action.]

(35) - (42) (No change.)

§321.35. Procedures for Making Application for Registration.

(a) (No change.)

(b) Applicants shall comply with the applicable provisions of §§305.43, 305.44, [305.46,] and 305.47 of this title (relating to Who Applies; Signatories to Applications; [Designation of Material as Confidential;] and Retention of Application Data).

(c) Application for registration under this section shall be made on forms prescribed by the executive director. Except as provided in §321.33(r) of this title and §321.48 of this title (relating to Regulation of Certain Dairy Concentrated Animal Feeding Operations (CAFOs)), a facility <u>that</u> [which] is not required under federal law to obtain National Pollutant Discharge Elimination System authorization may apply for a state-only registration, which authorizes the discharge or disposal of waste or wastewater into or adjacent to water in the state only in the event of a 25-year, 24-hour rainfall event, or may transfer from an individual permit to [such] a registration in accordance with §321.33(l) of this title. The applicant shall submit an original completed application with attachments and one copy of the 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. The completed application <u>must</u> [shall] be submitted to the executive director signed and notarized and with the following information:

(1) - (5) (No change.)

(6) a county general highway map (with graphic scale clearly shown) to identify the relative location of the CAFO and at least a one-mile [one mile] area surrounding the facility;

(7) (No change.)

(8) sections of the pollution prevention plan to be designated by the executive director. Prior to using [utilization of] wastewater retention facilities, documentation of liner certifications, signed, sealed, and dated by a licensed professional engineer or licensed professional geoscientist, shall [must] be submitted (if applicable);

(9) (No change.)

(10) a certification by a Natural Resources Conservation Service (NRCS) engineer, licensed professional engineer, or licensed professional geoscientist [qualified groundwater scientist] documenting the absence or presence of any recharge features identified on any tracts of land owned, operated, or controlled by the applicant and to be used as a part of a CAFO. Documentation[,] by the certifying party must [shall] identify the sources and/or methods used to identify the presence or absence of recharge features. The documentation must [shall] include 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. At a minimum, the records and/or maps of the following entities/agencies must [shall] be reviewed to locate any artificial recharge features:

(A) - (C) (No change.)

(D) Texas Commission on Environmental Quality [TNRCC];

(E) (No change.)

(F) previous owner of site, if available; [,] and

(G) on-site inspection of site with an [a] NRCS engineer, licensed professional engineer, or licensed professional geoscientist [qualified groundwater scientist];

(11) where the applicant cannot document the absence of recharge features on the tracts for which an application is being filed, the proposed site plan must [shall] also indicate the specific location of any and all recharge features found on any property owned, operated, or controlled by the applicant under the application as certified by an [a] NRCS engineer, licensed professional engineer, or licensed professional geoscientist [qualified groundwater scientist]. The applicant shall also submit a plan, developed by an [a] NRCS engineer or licensed professional engineer, to prevent impacts on any located recharge feature and associated groundwater formation. The plan [which] may include the following:

(A) (No change.)

(B) submission of a detailed groundwater monitoring plan prepared, certified, signed, sealed, and dated by a licensed professional geoscientist or licensed professional engineer covering all affected facilities and land application areas. At a minimum, the groundwater monitoring plan must [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) (No change.)

(12) - (15) (No change.)

(d) Each applicant shall pay an application fee as required by §305.53 of this title (relating to Application Fee [Fees]). An annual waste treatment inspection fee is also required of each registrant as required by §305.43 and §305.44 [§305.503 and §305.504] of this title [(relating to Fee Assessment and Fee Payment)]. An annual Clean Rivers Program fee is also required as required under §21.3 [§220.21(d)] of this title (relating to Fee Assessment [Water Quality Assessment Fees]). No fees under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) shall be required of an applicant for an authorization issued under this section.

(e) Each registrant shall comply with and is subject to the provisions of §§305.61, 305.64, and 305.33 - 305.68 of this title (relating to Applicability; Transfer of Permits; Permit Denial, Suspension, and Revocation; Revocation and Suspension upon [Upon] Request or Consent; Action and Notice on Petition for Revocation or Suspension).

(f) - (g) (No change.)

(h) Registrations issued under §321.37 or §321.47 of this title (relating to Actions [Action] on Applications for Registration or Initial Texas Pollutant Discharge Elimination System (TPDES) Authorization) shall expire five years after the effective date of these amendments (1999), and no new registrations shall be issued after that date. However, if the commission proposes to amend or readopt these rules prior to such expiration date, all registrations shall remain in effect until final commission action on the proposed amendment or readoption. An application for renewal of a registration under this section must be administratively and technically complete, meet all applicable technical requirements of this subchapter, and, except as otherwise provided in paragraphs (1) - (5) of this subsection, be processed according to §321.36 [and §321.37] of this title (relating to Notice of Application for Registration [and Action on Application for Registration]) and §321.37 of this title. A registration for a facility described in §321.33(a)(2) of this title may be renewed, according to the following procedures.

(1) Except as provided by §305.63(a)(3) of this title (relating to Renewals), an administratively and technically complete application may be granted by the executive director without

public notice if it does not propose any other change to the registration as approved. 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 registration in which the commission has determined that:

(A) a violation occurred that contributed to pollution of surface or groundwater [ground water], 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) - (C) (No change.)

(2) - (5) (No change.)

§321.39. Pollution Prevention Plans.

(a) (No change.)

(b) Where a Natural Resources Conservation Service (NRCS) plan has been prepared for the facility, the pollution prevention plan may refer to the NRCS plan when the NRCS plan documentation contains equivalent requirements for the facility. When the operator uses an [a] NRCS plan as partial completion of the pollution plan, the NRCS plan must be kept on site. Design and construction criteria

developed by the NRCS can be substituted for the documentation of design capacity and construction requirements (see subsection (f) of this section) of the pollution prevention plan provided the required inspections logs and water level logs in subsection (f)(3) and (11) of this section are kept with the NRCS plan [Plan]. Waste management plans developed by the NRCS can be substituted for the documentation of application rate calculations in subsection (f)(19) and (24) of this section. NRCS Waste Management Plans which have been prepared since January 1, 1989 are considered by the NRCS to contain adequate management practices. To insure the protection of water quality, the NRCS has determined that NRCS plans prepared prior to 1989 must be submitted for renewal with the NRCS [Natural Resources Conservation Service] or a waste management professional before December 1995. NRCS has determined that all plans should be reviewed every five years to insure proper management of wastes.

(c) - (e) (No change.)

(f) The plan must [shall] include, at a minimum, the following items.

(1) - (15) (No change.)

(16) The operator shall include in the plan, site-specific documentation that no significant hydrologic connection exists between the contained wastewater and waters in the state. Where the operator cannot document that no significant hydrologic connection exists, the ponds,

lagoons, and basins of the retention facilities must have liners that [a liner which] will prevent the potential contamination of surface waters and groundwaters.

(A) The operator can document lack of hydrologic connection by either: documenting that there will be no significant leakage from the retention structure; or documenting that any leakage from the retention structure would not migrate to waters in the state. This documentation shall be certified by an [a] NRCS engineer, licensed professional engineer, or licensed professional geoscientist [qualified groundwater scientist] and must include information on the hydraulic conductivity and thickness of the natural materials underlying and forming the walls of the containment structure up to the wetted perimeter.

(B) For documentation of no significant leakage, in-situ materials must, at a minimum, meet the minimum criteria for hydraulic conductivity and thickness as described in this section. Documentation that leakage will not migrate to waters in the state must include maps showing groundwater flow paths, or must show that the leakage enters a confined environment. A written determination by an [a] NRCS engineer, licensed professional geoscientist, or a licensed professional engineer 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.

(17) Site-specific conditions must [shall] be considered in the design and construction of liners. NRCS liner requirements or liners constructed and maintained in accordance with NRCS

design specifications in Appendix 10d of the Agricultural Waste Management Handbook (or its current equivalent) shall be considered to prevent hydrologic connections that [which] could result in the contamination of waters in the state. Liners for retention structures must [shall] be constructed in accordance with good engineering practices. Where no site-specific assessment has been done by an [a] NRCS engineer, licensed professional engineer, or licensed professional geoscientist [qualified groundwater scientist], the liner must [shall] be constructed to have a hydraulic conductivity [conductivities] no greater than 1 x 10^{-7} centimeters per second [cm/sec], with a thickness of 1.5 feet or greater or its equivalent [equivalency] in other materials.

(18) Where a liner is installed to prevent hydrologic connection, the operator must maintain the liner to inhibit infiltration of wastewaters. Liners must [shall] be protected from animals by fences or other protective devices. No tree [trees] shall be allowed to grow within the potential distance of the tree's root zone. Any mechanical or structural damage to the liner must [shall] be evaluated by an [a] NRCS engineer or a licensed professional engineer within 30 days of the damage. Documentation of liner maintenance must [shall] be kept with the pollution prevention plan. The operator shall have an [a] NRCS engineer, licensed professional engineer, or licensed professional geoscientist [qualified groundwater scientist] review the documentation and do a site evaluation every five years. If notified by the executive director that significant potential exists for the contamination of waters in the state or drinking water, the operator shall install a leak detection system or monitoring well(s) in accordance with that notice. Documentation of compliance with the notification must be kept with the pollution prevention plan, as well as all sampling data. In the event monitoring well(s) are required, the operator must sample each monitor well 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. 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. Data from any monitoring wells must be kept on site for three years with the pollution prevention plan. 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.

(19) - (30) (No change.)

(31) Operators submitting applications for renewal or expansion of existing facilities authorized under this subchapter to utilize a playa lake as a wastewater retention structure shall within 90 [ninety (90)] days of the effective date of the renewal, submit a groundwater monitoring plan to the Agriculture Section, Water Quality Division of the Texas [Natural Resource Conservation] Commission on Environmental Quality. At a minimum, the groundwater monitoring plan shall specify procedures to annually collect a groundwater sample from each well providing water for the facility, have each sample analyzed for chlorides and nitrates, and compare those values to background values for each well.

SUBCHAPTER C: MEAT PROCESSING

§321.55

STATUTORY AUTHORITY

The amendment is proposed under TWC, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; and Texas Civil Statutes, Article 3271b, the Act, which authorizes the public practice of geoscience in the State of Texas.

The proposed amendment implements TWC, §5.103 and §5.105, and Texas Civil Statutes, Article 3271b, the Act.

§321.55. Protection of Groundwater.

Any wastewater holding facility must [shall] conform to the requirements for seepage control specified [enumerated] in paragraphs (1) and (2) of this section. Any [such] facility in an area underlain by clean sands, fractured limestone, or other strata with exceptionally high permeability may be subjected to additional seepage control requirements.

(1) (No change.)

(2) Permeability data. Permeability tests may be required to show that pond liners are adequately impermeable to prevent excessive seepage. The acceptable seepage rate from ponds must [shall] be less than 0.1 acre-foot of wastewater per surface acre of pond per year. The acceptable permeability coefficient must [shall] be equal to or less than 1.0×10^{-7} centimeters per second [cm/sec.] at one foot of head and with one foot of permeable material or the equivalent or better thereof. The permeability coefficient must [shall] be determined by constant head laboratory permeability [permeameter] tests. The registrant shall furnish certification, signed, sealed, and dated by a licensed professional engineer or licensed professional geoscientist, that the completed pond lining meets the appropriate criteria described in this section prior to using the facilities.

SUBCHAPTER N: HANDLING OF WASTES FROM COMMERCIAL FACILITIES ENGAGED IN LIVESTOCK TRAILER CLEANING

§321.252, §321.255

STATUTORY AUTHORITY

The amendments are proposed under TWC, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; and Texas Civil Statutes, Article 3271b, the Act, which authorizes the public practice of geoscience in the State of Texas.

The proposed amendments implement TWC, §5.103 and §5.105, and Texas Civil Statutes, Article 3271b, the Act.

§321.252. Definitions.

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

(1) **Agronomic rate [Rate]** - The wastewater application rate designed:

(A) (No change.)

(B) to minimize the amount of nitrogen in the wastewater that passes below the root zone of the crop or vegetation grown on the land to the groundwater [ground water].

(2) **Edwards Aquifer** - That portion of an arcuate belt of porous, water-bearing limestones composed of the Comanche Peak, Edwards, and Georgetown formations trending from west to east to northeast through Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties. (See Chapter 213 [313] of this title (relating to Edwards Aquifer).)

(3) **Existing facilities [Facilities]** - Commercial livestock trailer cleaning facilities in active operation prior to January 5, 1996.

(4) **Facility wastewater [Wastewater]** - Any livestock trailer cleaning wastewater collected for treatment and disposal at a commercial facility, in accordance with the requirements of this subchapter.

(5) **Grab sample [Sample]** - An individual sample collected in less than 15 minutes.

(6) **Licensed professional geoscientist** - A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

(7) [(6)] **Livestock trailer cleaning facilities [Trailer Cleaning Facilities]** - Facilities which provide means to remove, contain, treat, and dispose of wastes from livestock trailers.

(8) [(7)] **New facilities [Facilities]** - Commercial livestock trailer cleaning facilities not defined in this section as existing facilities.

(9) [(8)] **Publicly owned treatment works (POTW) [Owned Treatment Works or "POTW"]** - A treatment works owned by a state or municipality, which includes any device or system used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment. This term also means the municipality which has jurisdiction over indirect discharges to and discharges from such a treatment works.

(10) [(9)] **Recharge zone [Zone]** - Generally, that area where the Edwards and associated limestones crop out in Kinney, Uvalde, Medina, Bexar, Comal, Hays, and Williamson Counties and the outcrops of other formations in proximity to the Edwards limestone, where faulting and fracturing may allow recharge of the surface waters to the Edwards Aquifer, and the area in Uvalde County within 500 feet of the Nueces, Dry Frio, Frio, and Sabinal Rivers downstream from the northern Uvalde County line to the recharge zone as otherwise delineated on official maps located in the offices of the commission and the Edwards Underground Water District. (See Chapter 213 [313] of this title (relating to Edwards Aquifer).)

(11) [(10)] **Registrant** - An individual or entity authorized by the executive director to dispose of wastewater from commercial facilities associated with the handling of waste from livestock trailer cleaning under the terms and requirements of this subchapter.

(12) [(11)] **Storm water** - Storm water runoff, snow melt runoff, surface runoff, and drainage.

§321.255. Requirements for Containment of Wastes and Pond(s).

(a) (No change.)

(b) All pond(s) used for the retention of treated or untreated wastewater shall be adequately lined to control seepage. The following methods of pond lining are acceptable.

(1) In-situ clay soils or placed and compacted clay soils meeting the following requirements:

(A) more [More] than 30% passing a Number [No.] 200 mesh sieve;

(B) liquid [Liquid] limit greater than 30%;

(C) plasticity [Plasticity] index greater than 15;

(D) a [A] minimum thickness of two feet;

(E) permeability [Permeability] equal to or less than 1 x 10^{-7} centimeter per second [cm/sec] (the requirements described in this subparagraph apply only to new ponds constructed or modified after the effective date of these regulations); and

(F) soil [Soil] compaction will be 95% standard proctor density at optimum moisture content (the requirements described in this subparagraph apply only to new ponds constructed or modified after the effective date of these regulations).

(2) - (3) (No change.)

(c) The registrant shall furnish certification, signed, sealed, and dated by a Texas licensed professional engineer [Registered Professional Engineer] or licensed professional geoscientist, that the completed pond lining meets the appropriate criteria described in this section prior to using [utilization of] the facilities. The certification must [shall] be sent to the agency's Wastewater Permits Section (MC 148) and a copy to the appropriate agency regional office [Regional Office].

(d) (No change.)

(e) All waste containment structures or ponds must be constructed to comply with minimum distance requirements specified in §290.41 of this title (relating to Water Sources) and with the

minimum distance requirements specified in 16 TAC §76.1000 [§338.43 of this title] (relating to Technical Requirements - Location and Standards of Completion for Wells [Location of Dewatering, Monitoring, Domestic, Industrial, Injection and Irrigation Wells]).

(f) (No change.)

SUBCHAPTER O: DISCHARGES FROM AQUACULTURE PRODUCTION FACILITIES

§321.271, §321.274

STATUTORY AUTHORITY

The amendments are proposed under TWC, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; and Texas Civil Statutes, Article 3271b, the Act, which authorizes the public practice of geoscience in the State of Texas.

The proposed amendments implement TWC, §5.103 and §5.105, and Texas Civil Statutes, Article 3271b, the Act.

§321.271. Definitions.

The following words and terms, when used in this subchapter, [shall] have the following meanings. [, unless the context clearly indicates otherwise:]

(1) - (2) (No change.)

(3) **Best management practices [Management Practices] (BMP)** - Schedule of activities, maintenance procedures, and other management 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 or waste disposal, drainage from raw material storage, or the abatement of nuisance odors and conditions. BMPs are those measures that are reasonable and ncessary to achieve a performance standard that protects and maintains air and water quality standards as well as existing and potential uses of groundwater.

(4) **Closed ponds** - Ponds (or lakes) without a mechanism to manipulate water levels (except for emergency spillways and other similar nonmechanical [non-mechanical] structures) or those ponds that are operated such that drawdowns are not allowed. If the use of groundwater [ground-water] wells or the diversion of surface water results in dry-weather discharges, such ponds are not defined as closed ponds.

(5) **Coastal zone** - That area along the Texas coast of the Gulf of Mexico as depicted in this definition. The boundary includes areas within the following Texas counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Liberty, Jefferson, and Orange.

Figure: 30 TAC §321.271(5) (No change.)

(A) - (D) (No change.)

(E) The seaward boundary is delineated as: That line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 United States Code (USC), §§1301 *et seq.* [§1301 et seq]).

(F) The boundary with the Republic of Mexico is delineated as: The boundary begins at a point three marine leagues into the Gulf of Mexico where the line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 USC, §§1301 *et seq.* [§1301 et seq]) intersects the international boundary between the United States and the Republic of Mexico; thence it continues in a westerly direction along the international border with the Republic of Mexico until it meets the International Toll Bridge in Brownsville.

(6) - (9) (No change.)

(10) **Edwards Aquifer** - As defined under §213.3 of this title (relating to Definitions [the Edwards Aquifer]), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone 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, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, 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.

(11) **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 designated as such on official maps located in the offices of the Texas [Natural Resource Conservation] Commission on Environmental Quality and the appropriate underground water conservation district.

(12) - (13) (No change.)

(14) **Licensed professional geoscientist** - A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

(15) [(14)] **mg/L [mg/l]** - Abbreviation for milligrams per liter.

(16) [(15)] **New facilities** - Aquaculture production facilities not in active operation and that have not discharged wastewater during the calendar year previous to the effective date of this rule.

(17) [(16)] **Nuisance** - Any emission of air contaminant(s), including but not limited to odors, that is of sufficient concentration and duration so as to be injurious or potentially injurious to

human health or welfare, animal life, vegetation, or property, or which interferes with the normal use and enjoyment of animal life, vegetation, or property.

(18) [(17)] **Operator** - Any person or entity in control of or having responsibility for the daily operation of an aquaculture production facility.

(19) [(18)] **Pond bottom sludges** - Accumulations of silt, soils, and other matter in the bottom of ponds.

(20) [(19)] **Process controls** - Structures, technologies, and practices used [utilized] to control the rate, volume, or quality of a discharge.

(21) [(20)] **Production pond** - Earthen ponds, raceways, fabricated tanks, or similar structures utilized in conjunction with the propagation or rearing of aquatic species.

(22) [(21)] **Production** - Weight of aquatic species as measured following harvest and prior to processing.

(23) [(22)] **Publicly owned treatment works (POTW)** - A treatment works owned and operated by a state or municipality which includes any device or systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing

treatment. This term also means the municipality that has jurisdiction over indirect discharges to, and discharges from, such a treatment works.

(24) [(23)] **Registrant** - An individual or entity authorized by the executive director to discharge wastewater from aquaculture facilities under the terms and requirements of a registration issued under [pursuant to] this subchapter.

(25) [(24)] **Shrimp research facilities** - Facilities whose primary purpose is the scientific research of shrimp aquaculture methods, disease control, waste control, wastewater treatment technology, and similar subjects.

(26) [(25)] **Tailwater control** - Diked or bermed area, pond, or other similar structure placed down-gradient of an irrigation site and designed to prevent off-site runoff or runoff to waters in the state.

(27) [(26)] **Total residual chlorine** - Chlorine concentration of the wastewater when discharged.

(28) [(27)] **Warm water aquatic species** - All aquatic species except those in the family Salmonidae (trout and salmon).

(29) [(28)] **Wastewater management pond** - Any structure used for containment, detainment, or treatment of wastewater, including settling ponds and canals used [utilized] to transport wastewater from the production pond to a settling pond or discharge point.

(30) [(29)] **Waste management unit** - Any structure used for containment, detainment, storage, processing, or treatment of solid wastes.

(31) [(30)] **Wastewater** - Water that is a result of the following operations:

(A) propagation, rearing, or transportation of aquatic species;

(B) washdown, cleaning, and flushing of fabricated tanks, raceways, ponds, and other containment structures;

(C) washdown and cleaning of equipment; or

(D) washing, treating, or any other direct contact with aquatic species.

(32) [(31)] **25-Year, 24-Hour rainfall event** - The maximum rainfall event with a probable recurrence interval of once in 25 years (4% [four percent] probability of occurrence in a given year), 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 information developed therefrom.

§321.274. Groundwater [Ground-Water] Protection.

(a) Wastewater management ponds and production ponds that contain water with a total dissolved solids content in excess of 2,000 milligrams per liter (mg/L) [mg/l] and all wastewater management ponds and production ponds that [which] are located within the Edwards Aquifer Recharge Zone, regardless of total dissolved solids content, must [shall] conform to the following requirements.

(1) All ponds whether constructed of earthen or other impervious material must [shall] be designed and constructed [so as] to prevent groundwater [ground-water] contamination.

(A) Soils used for pond lining shall be free from foreign material such as paper, brush, trees, and large rocks. All soil liners must be comprised of compacted material, at least 24 inches [24-inches] thick, compacted in lifts not greater than six inches thick and compacted to 95% of Standard Proctor Density. Soil liners must meet the following particle size gradation and Atterberg limits: 30% or more passing a Number [number] 200 mesh sieve; a liquid limit of 30% or greater; and a plasticity index of 15 or greater and a permeability less than, or equal to, 1×10^{-7} centimeters per second (cm/sec) [cm/sec].

(B) (No change.)

(C) In-situ liners at least 24 inches [24-inches] thick and meeting a permeability less than, or equal to, 1 x 10^{-7} cm/sec are acceptable alternatives to the requirements of subparagraphs (A) and (B) of this paragraph.

(D) (No change.)

(E) Signed, sealed, and dated certification [Certification] shall be furnished by a Texas licensed professional engineer or licensed professional geoscientist [Registered Professional Engineer] that the pond lining meets the appropriate criteria prior to using [utilization of] the facilities.

(2) (No change.)

(b) Production ponds and wastewater management ponds using [utilizing] water that [which] will not exceed a total dissolved solids concentration of 2,000 mg/L and [mg/l] are not located within the Edwards Aquifer Recharge Zone, and those ponds that [which] are not constructed in accordance with subsection (a) of this section must [shall] conform to the following requirements.

(1) All ponds whether constructed of earthen or other impervious materials must [shall] be designed and constructed [so as] to prevent groundwater [ground-water] contamination.

(A) Soils used for pond lining shall be free from foreign material such as paper, brush, trees, and large rocks. All soil liners must be of compacted material, at least 24 inches

[24-inches] thick, compacted in lifts no great than six inches and with material that has a permeability less than, or equal to, 1 x 10^{-4} cm/sec.

(B) (No change.)

(C) In-situ liners at least 24 inches [24-inches] thick meeting a permeability less than, or equal to, 1 x 10^{-4} cm/sec are acceptable alternatives to the requirements of subparagraphs (A) and (B) of this paragraph.

(D) Signed, sealed, and dated certification [Certification] shall be furnished by a Texas licensed professional engineer or licensed professional geoscientist [Registered Professional Engineer] that the pond lining meets the appropriate criteria prior to using [utilization of] the facilities.

(2) (No change.)

(c) An alternative method of pond lining, which will meet the performance standards provided by this section, may be utilized with the prior written approval of the executive director. Suitable materials for alternate pond linings may include impervious materials such as flexible membrane linings, asphalt-sealed fabric liners, and bentonite sealants. Installation of bentonite sealants and flexible membrane linings shall be in accordance with a detailed plan which meets the conservation practice standard and specification code 521, “Pond Sealing or Lining,” of the United States Department of Agriculture [USDA] Natural Resources Conservation Service.

(d) A specific exemption from the groundwater [ground-water] protection requirements of this section may be obtained from the executive director if, after the review of data submitted by the applicant, the executive director determines containment of the water in a production pond or wastewater management pond is not necessary, considering:

(1) soil and geologic data, and groundwater [ground-water] data, including its quality, uses, quantity, and yield; and

(2) adequate demonstration that impairment of groundwater [ground-water] for its actual or potential use will be prevented.

(e) Earthen ponds in existence on the date this subchapter becomes effective shall be exempt from the requirements of subsections (a), (b), or (c) of this section provided that:

(1) (No change.)

(2) operation of such ponds does not cause an adverse impact upon groundwater [ground-water].

(f) Whenever the discharge of waste or wastewater into groundwater [ground-water] occurs or is likely to occur which could cause degradation of groundwater [ground-water] quality, the executive director may require compliance with the provisions of subsections (a), (b), and (c) of this section.