

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes an amendment to §336.702 and proposes new §336.745 and §336.747.

Background and Summary of the Factual Basis for the Proposed Rules

The changes proposed to this chapter will revise the commission's radiation control rules to implement certain provisions of Senate Bill (SB) 1504 (82nd Legislature, 2011) and its amendments to Texas Health and Safety Code (THSC), Chapter 401, also known as the Texas Radiation Control Act (TRCA). This proposed rulemaking establishes provisions for incidental commingling of low-level radioactive waste (LLRW) accepted for disposal at the Texas Compact LLRW disposal facility. This proposed rulemaking also adds new definitions and implements the statutory prohibition on the acceptance of waste of international origin. An additional rulemaking is anticipated to implement other provisions of SB 1504 and THSC at a later date.

The commission recognizes that the revisions in THSC, §401.207(k) address the legislature's attempt to reconcile the goal to assure that there is adequate capacity in the compact waste disposal facility for party state compact waste and accommodate current commercial waste processing techniques that may result in the incidental commingling of party state compact waste with some waste from other sources. THSC, §401.207(k) requires the commission, in coordination with the Texas Low-Level Radioactive Waste Disposal Compact Commission, to adopt rules establishing criteria and thresholds by

which incidental commingling of party state compact waste and waste from other sources at a commercial processing facility is considered and reasonably limited. The criteria and thresholds for commingling established by the commission are binding on any criteria and thresholds that may be established by the Texas Low-Level Radioactive Waste Disposal Compact Commission.

Section by Section Discussion

Subchapter H, Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste

§336.702, Definitions

The commission proposes additional definitions to §336.702. The definition of "Commercial processing" is proposed to implement THSC, §401.207(k). The definition of processing is consistent with the definition of processing in §336.1203 and would include processing activities that occur outside the State of Texas. The commission proposes the definition of "Commingling" which was not defined in SB 1504. The commission proposes the definition of "Incidental" which was not defined in SB 1504. Because new THSC, §401.207(k) only applies to incidental commingling of party state compact waste with waste from other sources, the commission intends to define what makes commingling incidental. The proposed definition excludes intentional actions where wastes from different generators are purposefully combined. The proposed definition is based on some risk to occupational or public health and safety or the

environment that prevents the party state compact waste from being kept separate from waste from other sources. The commission requests comments on the definition of "Incidental." The commission proposes the definition of "Party state compact waste" consistent with new THSC, §401.2005(8). The commission proposes the definition of "Waste from other sources" as LLRW that is not party state compact waste. The commission proposes the definition of "Waste of international origin" to be consistent with new THSC, §401.2005(9).

§336.745, Incidental Commingling of Waste

The commission proposes new §336.745 to establish criteria and thresholds by which incidental commingling of party state compact waste and waste from other sources at a commercial processing facility is considered and reasonably limited. Section 336.745(a) prohibits the disposal of LLRW that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources except as authorized in §336.745. Subsection (b) limits the radioactivity content of waste from other sources to 5% of the total activity of the commingled waste. The 5% limitation corresponds to the Texas Low-Level Radioactive Waste Disposal Compact Commission's limitation in 31 TAC §675.22(c)(2). The commission invites comments on the establishment of this 5% limitation. Subsection (c) prohibits the disposal of LLRW that contains party state compact waste that has been commingled with waste from other sources if the commingling was not incidental to the processing. Because the statute

allows only incidental commingling, the intentional commingling of waste from different generators is not authorized. Subsection (d) requires the licensee's submission of a report to the executive director to ensure that commercially processed waste comports to the commingling requirements. If the licensee intends to dispose of waste that has been commercially processed, the licensee must submit a report identifying the generator; the waste processor; the waste processing methods; and the volume, physical form and radioactivity of the processed waste. If waste is not commingled, the report must certify that party state compact waste has not been commingled with waste from other sources. If the waste contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources, the report must provide additional information, including: the identity of each generator; certification that the radioactivity content of waste from other sources does not exceed 5% of the total activity and documentation of the methodology for determining the radioactivity content; and certification that the commingling was incidental to the processing of the waste. The licensee may not dispose LLRW that has been commercially processed without submitting the report required in §336.745(d). The proposed rule requires that the report must be provided ten days prior to the receipt of the waste. The commission invites comment on the timing of the report's submission. The criteria and thresholds for commingling under this section are binding on any criteria and thresholds that may be established by the Texas Low-Level Radioactive Waste Disposal Compact Commission.

§336.747, Waste of International Origin

The commission proposes new §336.747 to implement new THSC, §401.207(c) which prohibits the acceptance and disposal of waste of international origin.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jeffrey Horvath, Analyst in Strategic Planning and Assessment, has determined that for the first five-year period the proposed rules are in effect, no significant fiscal implications are anticipated for the agency and no fiscal implications are anticipated for other units of state or local government as a result of administration or enforcement of the proposed rules.

The proposed rulemaking implements a portion of SB 1504 and revises the commission's radiation control rules by providing criteria for the incidental commingling of LLRW. In order to implement the SB 1504 requirements, the agency would adopt rules, implement any necessary reporting requirements, and ensure compliance. Any administrative costs associated with these activities are not expected to be significant.

PUBLIC BENEFITS AND COSTS

Mr. Horvath has also determined that for each year of the first five years the proposed rulemaking is in effect, the public benefit anticipated from the changes seen in the proposed rulemaking will be compliance with state law and a potential limitation of liability to the state due to a prohibition on acceptance of unauthorized waste streams.

The proposed rulemaking is not expected to have fiscal implications for any individuals. One licensee currently authorized for commercial LLRW disposal issued under Chapter 336 must comply with the proposed rules. There may be fiscal implications for this particular licensee due to increased reporting requirements, but these fiscal implications are not expected to be significant.

The proposed rulemaking establishes criteria and thresholds for the incidental commingling of party state compact waste and waste from other sources at a commercial processing facility. In general, intentional commingling of LLRW from more than one generator is prohibited in order to attribute each waste shipment to a specific generator. Incidental commingling of LLRW as a result of commercial processing would be permissible under certain circumstances and within certain limits. The proposed rulemaking may result in some fiscal implications due to the potential of increased reporting requirements for one licensee authorized for commercial disposal of LLRW, but any costs are not expected to be significant.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

No adverse fiscal implications are anticipated for small or micro-businesses as a result of the proposed rules. No small or micro-businesses are authorized for the commercial disposal of LLRW.

SMALL BUSINESS REGULATORY FLEXIBILITY ANALYSIS

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rulemaking is required to comply with state law and does not adversely affect a small or micro-business in a material way for the first five years that the proposed rulemaking is in effect.

LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed this proposed rulemaking and 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 definition of a "major environmental rule" as defined in the Texas Government Code. "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 proposed rulemaking is not anticipated to 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 because there are no significant requirements imposed on radioactive material licensees. The commission proposes this rulemaking for the purpose of implementing state legislation that requires the commission to adopt rules addressing the incidental commingling of party state compact waste with waste from other sources. The proposed rules also add definitions and implement a statutory prohibition on the receipt and disposal of waste of international origin.

Furthermore, the proposed rulemaking does not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). Texas Government

Code, §2001.0225 only applies to a major environmental rule, 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. The proposed rulemaking does not exceed a standard set by federal law, an express requirement of state law, a requirement of a delegation agreement, nor adopt a rule solely under the general powers of the agency.

The TRCA, THSC, Chapter 401, authorizes the commission to regulate the disposal of LLRW in Texas. THSC, §§401.051, 401.103, and 401.104 authorize the commission to adopt rules for the control of sources or radiation and the licensing of the disposal of radioactive materials. New THSC, §401.207(k) specifically requires the commission to adopt rules establishing criteria and thresholds for the incidental commingling of party state compact waste with waste from other sources. In addition, the State of Texas is an Agreement State, authorized by the Nuclear Regulatory Commission (NRC) to administer a radiation control program under the Atomic Energy Act. The proposed rulemaking does not exceed the standards set by federal law. The proposed rulemaking implements new requirements in state statutes enacted in SB 1504.

The proposed rulemaking does not exceed an express requirement of state law. The TRCA, THSC, Chapter 401 establishes general requirements for the licensing and disposal of radioactive materials. The TRCA in THSC, §401.207(k) specifically requires the commission to establish criteria and thresholds relating to the commingling of waste.

The commission has also determined that the proposed rulemaking does not exceed a requirement of a delegation agreement or contract between the state and an agency of the federal government. The State of Texas has been designated as an Agreement State by the NRC under the authority of the Atomic Energy Act. The Atomic Energy Act requires that the NRC find that the state radiation control program is compatible with the NRC's requirements for the regulation of radioactive materials and is adequate to protect health and safety. The commission determined that the proposed rules do not exceed the NRC's requirements nor exceed the requirements for retaining status as an Agreement State.

The commission also determined that the rulemaking is proposed under specific authority of the TRCA, THSC, Chapter 401. THSC, §§401.051, 401.103, and 401.104 authorize the commission to adopt rules for the control of sources or radiation and the licensing of the disposal of radioactive materials. New THSC, §401.207(k) specifically

requires the commission to adopt rules establishing criteria and thresholds relating to the commingling of waste.

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

Takings Impact Assessment

The commission evaluated these proposed rules and performed a preliminary assessment of whether the proposed rules constitute a taking under Texas Government Code, Chapter 2007. The specific purpose of the rules is to implement statutory requirements establishing criteria and thresholds for the disposal of LLRW that contains party state compact waste that has been commingled with waste from other sources. The proposed rules also add definitions and implement a statutory prohibition of the acceptance and disposal of waste of international origin.

Promulgation and enforcement of the proposed rules would be neither a statutory nor a constitutional taking of private real property because the proposed rules do not affect real property. Because the proposed rules do not affect real property, the rules do not burden, restrict or limit an owner's right to real property or reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulation. The proposed rules establish criteria and thresholds relating to the commingling of party

state compact waste with waste from other sources and implement a prohibition already established in state statute. Therefore, the proposed rules will not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed this proposed rulemaking action and determined that the proposed rule is neither identified in, nor will it affect, any action/authorization identified in Coastal Coordination Act Implementation Rules in 31 TAC §505.11, relating to Actions and Rules Subject to the Texas Coastal Management Program (CMP).

Therefore, the proposed rulemaking action is not subject to the CMP.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Announcement of Hearing

The commission will hold a public hearing on this proposal in Austin on January 12, 2012, at 2:00 p.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing;

however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Ms. Sandy Wong, Office of Legal Services at (512) 239-1802. Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Bruce McAnally, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. Electronic comments may be submitted at: <http://www5.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2011-036-336-WS. The comment period closes January 23, 2012. Copies of the proposed rulemaking can be obtained from the commission's Web site at http://www.tceq.texas.gov/nav/rules/propose_adopt.html. For further information, please contact Susan Jablonski, Radioactive Materials Division, (512) 239-6731.

**SUBCHAPTER H: LICENSING REQUIREMENTS FOR NEAR-SURFACE
LAND DISPOSAL OF LOW-LEVEL RADIOACTIVE WASTE**

§§336.702, 336.745, 336.747

Statutory Authority

The amendment and new rules are proposed under the Texas Radiation Control Act, Texas Health and Safety Code (THSC), Chapter 401; THSC, §401.011, which provides the commission authority to regulate and license the disposal of radioactive substances, the commercial processing and storage of radioactive substances, and the recovery and processing of source material; §401.051, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, which requires the commission to provide rules for licensing for the disposal of radioactive substances; §401.201, which provides authority to the commission to regulate the disposal of low-level radioactive waste; §401.207, which authorizes the commission to adopt rules establishing criteria and thresholds; and §401.412, which provides authority to the commission to regulate licenses for the disposal of radioactive substances. The proposed amendment and new rules are also authorized by Texas Water Code, §5.103, which provides the commission

with the authority to adopt rules necessary to carry out its powers and duties under the water code and other laws of the state.

The proposed amendment and new rules implement THSC, Chapter 401, including §§401.011, 401.051, 401.057, 401.059, 401.103, 401.104, 401.151, 401.201, 401.2005, 401.207, 401.301, and 401.412.

§336.702. Definitions.

Terms used in this subchapter are defined in §336.2 of this title (relating to Definitions). Additional terms used in this subchapter have the following definitions.

(1) Active maintenance--Any significant remedial activity needed during the period of institutional control to maintain a reasonable assurance that the performance objectives in §336.724 of this title (relating to Protection of the General Population from Releases of Radioactivity) and §336.725 of this title (relating to Protection of Individuals from Inadvertent Intrusion) are met. Active maintenance includes ongoing activities such as the pumping and treatment of water from a disposal unit or one-time measures such as replacement of a disposal unit cover. Active maintenance does not include custodial activities such as repair of fencing, repair or replacement of monitoring equipment, revegetation, minor additions to soil cover,

minor repair of disposal unit covers, and general disposal site upkeep such as mowing grass.

(2) Buffer zone--A portion of the disposal site that is controlled by the licensee and that lies under the disposal units and between the disposal units and the boundary of the disposal site.

(3) Chelating agent--A chemical or complex which causes an ion, usually a metal, to be joined in the same molecule by relatively stable bonding, e.g., amine polycarboxylic acids (e.g., EDTA, DTPA), hydroxycarboxylic acids, and polycarboxylic acids (e.g., citric acid, carboic acid, and gluconic acid).

(4) Commencement of major construction--Any clearing of land, excavation, or other substantial action that would adversely affect the environment of a land disposal facility. The term does not mean disposal site exploration, necessary roads for disposal site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the disposal site or the protection of environmental values.

(5) Commercial processing--The storage, extraction of materials, transfer, volume reduction, compaction, incineration, solidification, or other separation and

preparation of radioactive substances from other persons for reuse or disposal, including any treatment or activity that renders the waste less hazardous, safer for transport, or amenable to recovery, storage, or disposal.

(6) Commingling--Any mixing, blending, down-blending, diluting, or other processing that combines radioactive substances from two or more generators resulting from the commercial processing of radioactive substances.

(7) [(5)] Containerized Class A waste--Class A low-level radioactive waste which presents a hazard because of high radiation levels. High radiation levels are radiation levels from an unshielded container that could result in an individual receiving a dose equivalent in excess of 0.1 rem (1 millisievert) in one hour at 30 centimeters from any surface of the container that the radiation penetrates.

(8) [(6)] Custodial agency--A government agency designated to act on behalf of the government owner of the disposal site.

(9) [(7)] Disposal site--That portion of a land disposal facility which is used for disposal of waste. It consists of disposal units and a buffer zone.

(10) [(8)] Disposal unit--A discrete portion of the disposal site into which waste is placed for disposal. For near-surface disposal, the disposal unit is usually a trench.

(11) [(9)] Engineered barrier--A man-made structure or device that is intended to improve the land disposal facility's ability to meet the performance objectives in this subchapter.

(12) [(10)] Explosive material--Any chemical compound, mixture, or device which produces a substantial instantaneous release of gas and heat spontaneously or by contact with sparks or flame.

(13) [(11)] Government agency--Any executive department, commission, independent establishment, or corporation, wholly or partly owned by the United States of America or the State of Texas and which is an instrumentality of the United States or the State of Texas; or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the government.

(14) [(12)] Hydrogeologic unit--Any soil or rock unit or zone which by virtue of its porosity or permeability, or lack thereof, has a distinct influence on the storage or movement of groundwater.

(15) [(13)] Inadvertent intruder--A person who might occupy the disposal site after closure and engage in normal activities, such as agriculture, dwelling construction, or other pursuits in which the person might be unknowingly exposed to radiation from the waste.

(16) Incidental--Unintentional actions that, with respect to commingling of waste, prevent party state compact waste from being kept separate from waste from other sources without undue risk to occupational or public health and safety or the environment.

(17) [(14)] Intruder barrier--A sufficient depth of cover over the waste that inhibits contact with waste and helps to ensure that radiation exposures to an inadvertent intruder meet the performance objectives set forth in this subchapter, or engineered structures that provide equivalent protection to the inadvertent intruder.

(18) [(15)] Monitoring--Observing and making measurements to provide data to evaluate the performance and characteristics of the disposal site.

(19) Party state compact waste--Low-level radioactive waste generated in a party state of the Texas Low-Level Radioactive Waste Disposal Compact.

(20) [(16)] Pyrophoric material--

(A) Any liquid that ignites spontaneously in dry or moist air at or below 130 degrees Fahrenheit (54.5 degrees Celsius); or

(B) Any solid material, other than one classed as an explosive, which under normal conditions is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious transportation, handling, or disposal hazard. Included are spontaneously combustible and water-reactive materials.

(21) [(17)] Reconnaissance-level information--Any information or analysis that can be retrieved or generated without the performance of new comprehensive site-specific investigations. Reconnaissance-level information includes, but is not limited to, relevant published scientific literature; drilling records required by the commission or other state agencies, such as the Railroad Commission of Texas and the Texas Natural Resources Information System; and reports of governmental agencies.

(22) [(18)] Site--The contiguous land area where any land disposal facility or activity is physically located or conducted including adjacent land used in connection with the land disposal facility or activity, and includes soils and groundwater

contaminated by radioactive material. Activity includes the receipt, storage, processing, or handling of radioactive material for purposes of disposal at a land disposal facility.

(23) [(19)] Site closure and stabilization--Those actions that are taken upon completion of operations that prepare the disposal site for custodial care and that assure that the disposal site remain stable and not need ongoing active maintenance.

(24) [(20)] Stability--Structural stability.

(25) [(21)] Surveillance--Observation of the disposal site for purposes of visual detection of need for maintenance, custodial care, evidence of intrusion, and compliance with other license and regulatory requirements.

(26) [(22)] Waste--See "low-level radioactive waste" as defined in §336.2 of this title (relating to Definitions).

(27) Waste from other sources--Any low-level radioactive waste that is not party state compact waste.

(28) Waste of international origin--Low-level radioactive waste that originates outside of the United States or territory of the United States, including waste subsequently stored or processed in the United States.

§336.745. Incidental Commingling of Waste.

(a) A licensee authorized to dispose of waste from other persons may not dispose low-level radioactive waste that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources except as provided in this section.

(b) A licensee may not dispose low-level radioactive waste that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources if the radioactivity of the waste from other sources exceeds 5% of the total activity of the commingled waste.

(c) A licensee may not dispose low-level radioactive waste that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources unless the commingling was incidental to the processing of the waste.

(d) Ten days prior to the receipt of low-level radioactive waste that has been commercially processed:

(1) The licensee shall submit a report to the executive director that identifies the generator of the low-level radioactive waste by name, address, and license number; the processor of the low-level radioactive waste by name, address, and license number; the methods used to process the waste; and the volume, physical form and activity of the processed waste received for disposal at the compact waste disposal facility:

(2) If the waste does not contain party state compact waste that has been commingled at a commercial processing facility with waste from other sources, the licensee and the processor shall certify that party state compact waste has not been commingled with low-level radioactive waste from other sources; and

(3) If the waste contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources, the report submitted under paragraph (1) of this subsection must:

(A) identify each generator of the waste from other sources by name, address, and license number;

(B) certify that the radioactivity content of waste from other sources does not exceed 5% of the total activity of the commingled waste and provide documentation of how the radioactivity content was determined; and

(C) certify that the commingling of the waste was incidental to the processing of the waste and that the commingled waste could not have been kept separate without undue risk to occupational or public health and safety or the environment.

(e) The licensee may not dispose of low-level radioactive waste that has been commercially processed without submitting the report required in subsection (d) of this section.

§336.747. Waste of International Origin.

The licensee may not receive or dispose of waste of international origin at a land disposal facility licensed under this chapter.