

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners Date: April 27, 2012

Thru: Bridget C. Bohac, Chief Clerk
Mark Vickery, P.G., Executive Director

From: Brent Wade, Deputy Director
Office of Waste

Subject: **Docket No. 2011-1905-RUL.** Outlined summary indicating changes since pre-filing for 30 TAC Chapter 336, Radioactive Substance Rules SB 1504: Phase I (Rule Project No. 2011-036-336-WS)

The attached revisions are shown in *double underline/double strikeout* and are provided as *REVISED PRE-FILING MATERIAL* to the documents filed on April 13, 2012, scheduled for your consideration on the May 16, 2012, agenda.

Some edits were made to add to the readability or correct grammatical mistakes of the preamble, response to comments, and the interoffice memorandum for commission approval for rulemaking adoption. They will not be mentioned in this memorandum but have been shown in *double underline/double strikeout*.

CHANGES TO PREAMBLE

- On page 3 -- changed "party and nonparty generators" to "party state and nonparty state generators" to the section discussion of §336.702 to be consistent with the terms defined in the regulations.
- On page 4 -- language was added to the section discussion of §336.702 to indicate that an applicability subsection was added as §336.745(a) in response to comments and that consequently the remaining subsections were re-lettered.
- On page 6 -- language was added to the section discussion of §336.745 to expand the description of how the proposed commingling rules were changed based on

different waste streams.

- On pages 6 and 7 -- changed two-times an "and" to an "or" in the section discussion of §336.745(g) to correct an error.

CHANGES TO RESPONSE TO COMMENTS

- On pages 13 and 14 -- part of a comment and the corresponding response to that comment was moved to pages 21 and 22 to improve the organization of the response to comments.
- On page 13 -- language was added in the response to a comment that the definition of commingling in §336.702(6) be changed that instead of changing the definition the commission adopted an applicability subsection §336.745(a).
- On page 16 -- the response to a comment that the definition of compact party state waste should be changed to include out-of-compact waste that the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDC) has accepted for importation to the Texas Low-Level Radioactive Waste (LLRW) Compact was rewritten to clarify the commission's response.
- On pages 18 and 19 -- language was added to and one sentence removed from the response to a comment that the definition of commingling in §336.702(6) should be changed to clarify and add more explanation behind the reasoning of the agency's response.
- On pages 19 and 20 -- text was rewritten in the response to a comment that the definition of incidental in §336.702(16) to clarify the commission's response.
- On page 21 -- a comment and the corresponded response was moved to this page from page 39 to improve the organization of the response to comments.
- On page 23 -- language was added to the response to a comment supporting the 5% radioactivity commingling limit to clarify that the response concerned waste that had not been approved for importation for disposal by the TLLRWDC.
- On pages 25 to 27 -- language was added to the response to comments disagreeing with the 5% radioactivity commingling limit to add more explanation behind the reasoning of the agency's response.
- On page 31 -- language was added to the response to a comment that §336.745(d)(2) should be rewritten to clarify how the proposed rules were revised in response to this comment.
- On page 33 -- language was added to the response to a comment that §336.745

should be revised to include "certified" waste processors to clarify the commission's response.

- On page 34 -- language was added to the response to a comment that the commission does not provide oversight to the waste processors to clarify that the waste processors have reporting requirements for waste to be disposed in Texas and that deliberate falsification on these reports may be subject to enforcement.
- On pages 35 and 36 -- language was removed to the response to a comment that the proposed rules should be modified to require waste that has exceeded the commingling limit to have an import permit from the TLLRWDC because the language did not add to the explanation of the commission's response.
- On page 37 -- language was added to the response to the comment that the processor should be required to notify the generator of the results of the processing of its waste to clarify the commission's response.
- On page 37 -- language was added to the response to the comment that the proposed §336.745(d)(3)(B) and (C) did not provide any guidance to clarify that the waste may be imported for disposal through an agreement from the TLLRWDC.
- On page 42 -- language was added to the response to the comment disagreeing with the commission's determination that this proposed rule is not a "major environmental rule" to clarify the commission's response.

CHANGES TO RULE LANGUAGE

- On page 51 -- language was removed from §336.745(a) to change "This section does not limit party state compact waste that is commingled with other party state compact waste during processing nor low-level radioactive waste that is subject to an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission for the importation of low-level radioactive waste into the compact for disposal that is commingled with other low-level radioactive waste that is also subject to an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission for the importation of low-level radioactive waste into the compact for disposal" to "This section does not limit party state compact waste that is commingled with other party state compact waste during processing nor low-level radioactive waste that is subject to an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission for the importation of low-level radioactive waste into the compact for disposal."

CHANGES TO INTEROFFICE MEMORANDUM FOR COMMISSION APPROVAL FOR RULEMAKING ADOPTION

- On page 4 -- language was removed from the significant changes to proposal

section concerning modifications to the definition of waste from other sources in §336.702(27) which was erroneously not removed in a prior draft version.

- On page 4 -- the word "not" was removed from the significant changes to proposal section which was added in error.
- On page 4 -- language was added to the significant changes to proposal section to expand the description of the adopted commingling limits.
- On page 4 -- language was added to the significant changes to proposal section describing the adopted commingling limits for waste streams not identified in §336.745(e).

Attachments:

Copy of changes to April 13 Pre-filed material

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** April 27~~8~~, 2012

Thru: Bridget Bohac, Chief Clerk
Mark Vickery, P.G., Executive Director

From: Brent Wade, Deputy Director
Office of Waste

Docket No.: 2011-1905-RUL

Subject: Commission Approval for Rulemaking Adoption
30 TAC Chapter 336, Radioactive Substance Rules
SB 1504: Phase I
Rule Project No. 2011-036-336-WS

Background and reason(s) for the rulemaking:

The revisions in Texas Health and Safety Code (THSC), §401.207 implemented in this rulemaking address the availability and reservation of disposal capacity in the Compact Waste Disposal Facility for low-level radioactive waste (LLRW) generated in a party state to the Texas Compact and the realities of commercial radioactive waste processing activities where party state compact waste may become commingled with waste from other sources.

Senate Bill (SB) 1504, 82nd Legislature, 2011, revised THSC, §401.207 to require the commission to adopt rules that 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. SB 1504 also adds new definitions in THSC, §401.2005 and prohibits the acceptance of waste of international origin in THSC, §401.207. The commission is required to coordinate its rulemaking with the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDC), but any criteria and thresholds established by the commission rule are binding on any criteria and thresholds established by the TLLRWDC.

Other provisions of SB 1504, including the setting of interim disposal rates, commission studies, and imposition of fee surcharges will be implemented by the Texas Commission on Environmental Quality (TCEQ) in separate actions.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The rulemaking adds new definitions in §336.702 of "commercial processing," "commingling," "incidental," "party state compact waste," "waste from other sources," and "waste of international origin."

The rulemaking for §336.745 implements THSC, §401.207(k) to limit the disposal of LLRW that contains party state compact waste that has been commingled at a commercial processing facility, as provided in §336.745. The applicability subsection in §336.745(a) explains that the commingling limitations of compact party state waste with waste from other sources does not

prohibit the commingling of compact party state waste with waste from different in-Compact generators and also recognizes that the comingled nonparty waste ~~is~~ can be subject to the terms of an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal. Section 336.745(b) limits the disposal of LLRW that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources only as authorized in §336.745. Under §336.745(c), the comingled waste from other sources must meet the thresholds and criteria established in §336.745(g). Section 336.745(d) prohibits the disposal of comingled waste unless the commingling was incidental to the processing of the waste at a commercial processing facility. In order to ensure that waste that has been commercially processed meets the requirements with respect to commingling, under §336.745(e), the licensee of the Compact Waste Disposal Facility will be required to submit a report to the executive director that identifies the generator of the waste; the processor of the waste; the processing methods; and the volume, physical form, and radioactivity of the processed waste. There must be a certification whether party state compact waste has been commingled with waste from other sources, that it has not been commingled, either intentionally or unintentionally, with waste of international origin, and that it has not been intentionally commingled with nonparty compact waste. There must also be certification that the processed waste meets the requirements of §336.229 and that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing. If party state compact waste has been commingled with waste from other sources, the report must identify waste streams as they enter and exit a specific process at a commercial processing facility, and certify that the commingling of the waste was incidental to the processing of the party state compact waste. The commingling threshold and criteria have been established by §336.745(g) by waste stream, specifically Class A LLRW for Dry Active Waste (DAW) and for Nuclear Utility Resin, and for Class B and C LLRW which is either Nuclear Utility Resin or Nuclear Utility Filter waste.

The new §336.747 implements THSC, §401.207, which prohibits the acceptance of waste of international origin.

B.) Scope required by federal regulations or state statutes:

This rulemaking is required by new THSC, §401.207(k) , which is added by SB 1504.

C.) Additional staff recommendations that are not required by federal rule or state statute:

None.

Statutory authority:

THSC, §401.207, Out-of-State Waste

THSC, §401.011, Radiation Control Agency

THSC, §401.051, Adoption of Rules and Guidelines

THSC, §401.103, Rules and Guidelines for Licensing and Registration

THSC, §401.104, Licensing and Registration Rules

THSC, §401.412, Commission Licensing Authority
Effect on the:

A.) Regulated community:

This rulemaking will affect the compact waste disposal facility license holder, commercial processors of LLRW, generators of LLRW, and the Texas Low-Level Radioactive Waste Compact Commission.

B.) Public:

There is general public interest in the activities at the compact waste disposal facility, but the rulemaking affects those who dispose, process, or generate LLRW.

C.) Agency programs:

Office of Waste: Staff review of reports submitted under new §336.745 will be required to address the receipt and disposal of waste that has been processed at a commercial waste processing facility. No additional full-time employees (FTEs) are required.

Environmental Law Division: Legal support for the Office of Waste, as necessary. No additional FTEs are required.

Stakeholder meetings:

A public hearing on the rules was held on January 12, 2012. The commission received comments from Waste Control Specialist (WCS), Energy Solutions, Studsvik, Advocates for Responsible Disposal in Texas (ARDT), Entergy Services, Inc. representing Vermont Yankee, Cox, Smith, Matthews (CSM) representing the South Texas Project Nuclear Operating Company, Luminant Power, which owns and operates Comanche Peak Nuclear Power Plant, the Sustainable Energy and Economic Development (SEED) Coalition, and Robert Singleton representing himself. The commission has been working in coordination with the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDC) on this rulemaking through an appointed TLLRWDC Rules Committee. Comments have been received and discussed with the TLLRWDC as part of the commission's coordination efforts.

Public comment:

The comment period closed on January 23, 2012. The commission received written comments from WCS, Energy Solutions, Studsvik, ARDT, Entergy Services, Inc. representing Vermont Yankee, CSM, the Southeast Compact Commission, the SEED Coalition, and the Texas Radiation Advisory Board.

The majority of the comments received suggested that the limitation to 5% by radioactivity of waste from other sources ~~incidental commingling rule~~ should either be increased to a higher percentage, be by volume or mass instead of radioactivity, be dependent on the processing technique, and/or be based on pre-processing data. Some comments stated that the 5% radioactivity limit be reduced to 1% and one comment stated that 5% by radioactivity was good. Other comments were to allow the commingling of compact party state waste and LLRW that is subject to an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal from different generators.

Other comments concerned certification of processors and certification of how the waste was processed, changes in some of the definitions, exemptions from the commingling limits for certain types of waste, the prevention of commingling of international waste with domestic waste, changes in the reporting requirements, the inclusion of a discussion concerning sealed sources, defining when a radioactive substance becomes a waste, and grandfather clauses for preexisting contracts between generators and processor.

Significant changes from proposal:

The definitions of commingling in §336.702(6) was changed from listing waste processes to "any process" based on a comment from WCS. ~~The definition of waste from other sources in §336.702(27) was modified by adding an explanation that this term did not include LLRW subject to an agreement of the CC for the importation of LLRW into the compact for disposal based on comments from WCS, CSM, Studsvik, and ARDT.~~ A new §336.745(a) was added to clarify that compact party state waste from different generators can be commingled and that LLRW subject to an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal from different generators can be commingled based on comments from ARDT, TLLRWDC and CSM. Additional certification requirements by the licensee and the processor were added for processed waste to certify that no party state compact waste has been commingled, either intentionally or unintentionally, with waste of international origin based on comments from the SEED Coalition and to certify that no party state compact waste has ~~not~~ been intentionally commingled with nonparty compact waste based on comments from the SEED Coalition. A new requirement was added for the licensee and the processor to certify that the processed waste meets the requirements of §336.229 based on comments from WCS and ARDT and that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing based on comments from the TLLRWDC and TRAB. Section 336.745 was modified to change the commingling limit from 5% by radioactivity for all waste to specific limits for different types of waste streams. Different limits of the amount of waste from other sources are established for different waste streams by volume, radioactivity, or weight. Waste from other sources may not exceed: ~~lesser of either~~ 0.05 µCi per gram or 10% of Class A LLRW limit for Dry Active Waste, Nuclear Utility Resin, and Nuclear Utility Filter waste, and 10% by volume and radioactivity for Class B and C LLRW which is either Nuclear Utility Resin or Nuclear Utility Filters based on comments from ARDT, Entergy Services, EnergySolutions, the Southeast Compact Commission, Studsvik and CSM. For waste streams not identified in subsection 336.745(e), the waste from other sources may not exceed 10% by volume, weight, radioactivity, or concentrations limits. The time that the report required in §336.745 is due was changed from ten days to five days in response to a comment from WCS.

Potential controversial concerns and legislative interest:

Comments demonstrated a wide divergence of opinion on the originally proposed 5% radioactivity commingling limit. Some comments wanted the limit more strict by having it be 1% by activity, one agreed with the 5% limit, and other comments stated that this limit was unrealistic and wanted it changed to either a higher percentage of radioactivity, be based on volume, or be based on waste type and processing technique. The commingling limits were revised based on comments.

Will this rulemaking affect any current policies or require development of new policies?

No.

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What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

TCEQ is required by state statute to adopt rules on the incidental commingling of party state compact waste with waste from other sources.

Key points in the adoption rulemaking schedule:

***Texas Register* proposal publication date: December 23, 2011**
Anticipated *Texas Register* adoption publication date: June 1, 2012
Anticipated effective date: June 7, 2012
Six-month *Texas Register* filing deadline: June 25, 2012

Agency contacts:

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Attachments

Senate Bill 1504

cc: Chief Clerk, 2 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Anne Idsal
Curtis Seaton
Ashley Morgan
Office of General Counsel
Hans Weger
Bruce McAnally

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

Sections 336.702 and 336.745 are adopted *with changes* to the proposed text as published in the December 23, 2011, issue of the *Texas Register* (36 TexReg 8725).

Section 336.747 is adopted *without change* to the proposed text and will not be republished.

Background and Summary of the Factual Basis for the Adopted Rules

The changes 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 rulemaking establishes provisions for incidental commingling of low-level radioactive waste (LLRW) accepted for disposal at the Texas Compact LLRW disposal facility. This 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

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compact waste disposal facility for party state compact waste and to 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 (TLLRWDC), 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 TLLRWDC.

Section by Section Discussion

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

§336.702, Definitions

The commission adopts additional definitions to §336.702. The definition of "Commercial processing" is adopted to implement THSC, §401.207(k). The definition of processing is consistent with the definition of processing in §336.1203 and includes processing activities that occur outside the State of Texas. The commission adopts the definition of "Commingling" which was not defined in SB 1504. The commission adopts the definition of "Incidental" which was not defined in SB 1504. Because new THSC,

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§401.207(k) applies to incidental commingling of party state compact waste with waste from other sources, the commission has defined what makes commingling incidental. The adopted definition excludes intentional actions where wastes from different generators are purposefully combined to batch or otherwise group waste from more than one waste generator. Intentional commingling can also be used to batch or group waste from several party state generators to reduce the probability of incidental commingling of waste from other sources at a commercial processing facility utilized by both party state and nonparty state generators. Incidental commingling is an unavoidable or otherwise unintentional consequence of processing LLRW in a commercial facility for volume reduction, waste form improvement, physical considerations, and/or to meet disposal criteria. Processing waste for these purposes are recognized to be beneficial and preferred for some waste streams. The adopted 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 during processing. The commission adopts the definition of "Party state compact waste" consistent with new THSC, §401.2005(8). The commission adopts the definition of "Waste from other sources" as LLRW that is not party state compact waste. The commission adopts the definition of "Waste of international origin" which is consistent with new THSC, §401.2005(9).

§336.745, Incidental Commingling of Waste

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The commission adopts 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. In response to comments, an applicability subsection was added as §336.745(a). Section 336.745(a) clarifies that the commingling limitations do not apply to the commingling of party state compact waste from different party state generators nor to ~~and acknowledges that any processing of~~ waste from nonparty state generators ~~is~~ subject to the terms and requirements of an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal. Because of the addition of a new subsection (a), the remaining subsections were re-lettered. Section 336.745(b) limits the disposal of LLRW that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources under the thresholds and criteria authorized in §336.745. Subsection (c) limits the waste from other sources to the thresholds and criteria in subsection (g). Subsection (d) 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 addresses only incidental commingling, the intentional commingling of waste from different generators is not addressed in this section. Subsection (e) requires the generator's submission of a report to the executive director to ensure that commercially processed waste comports to the commingling requirements. The licensee must submit a report identifying the generator; the waste processor; the waste processing methods;

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and the volume, physical form and radioactivity of the processed waste. The report must certify that party state compact waste has not been commingled with waste from other sources, except for commingling incidental to processing and that the content of waste from other sources does not exceed the thresholds and criteria described in subsection (g). The report must also certify that the party state compact waste has not been commingled, either intentionally or unintentionally, with waste of international origin, that it has not been intentionally commingled with nonparty compact waste, that the processed waste meets the requirements of §336.229, Prohibition of Dilution, and that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing. Under existing rule in §336.229, no person may reduce the concentration of radioactive constituents by dilution to meet exemption levels or to change the waste's classification or disposal requirements. 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 and certification of waste inventory from a party state compact generator at the point of waste entrance into and exit from a processing unit or piece of processing equipment where it has been incidentally commingled; certification that the radioactivity content of waste from other sources does not exceed the limits described in subsection (g) and documentation of the methodology for determining the commingled thresholds and criteria; and certification that the commingling was incidental to the processing of the waste. The licensee may not

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dispose of LLRW that has been commercially processed without submission of the report required in §336.745(e). The adopted rule requires that the report must be provided a minimum of five days prior to the receipt of the waste. In response to comments, revised thresholds and criteria are established for waste from other sources that is commingled incidentally with compact state party waste. As originally proposed, the only threshold was based on 5% radioactivity. In response to comments, the Revised thresholds and criteria have been revised and are specified for the type of waste. Because different waste streams are subjected to different processing techniques, a single limitation based only on radioactivity is not feasible. Instead, the commission adopts different limitations that are specific to the type of waste stream. Waste from other sources, after processing, may not exceed the limits established in subsection (g). Subsection (g) defines the commingling thresholds and criteria for Class A LLRW waste streams of Dry Active Waste (DAW), Compactable Trash, Nuclear Utility Resins, and Nuclear Utility Filter waste not to exceed as less than 10% by weight of the processed waste and radioactivity not to exceed the lesser of either 0.05 microcurie (μCi) of any radionuclide per gram or 10% of the concentration limit for Class A LLRW consistent with §336.362, Appendix E; for Class B and C LLRW that which is either Nuclear Utility Resin or Nuclear Utility Filters not to exceed as less than 10% by volume and 10% radioactivity; for Class B and C waste streams not identified in the rule not to exceed as less than 10% by volume, total weight, or and total radioactivity; and for Class A waste streams not identified in the rule not to exceed as less than 10% by volume, total weight,

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total radioactivity, ~~or~~ and concentration limit for Class A low-level radioactive waste consistent with §336.362, Appendix E. The criteria and thresholds for commingling under this section are for waste streams authorized by a disposal license issued under this chapter and are binding on any criteria and thresholds that may be established by the TLLRWDC.

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

Final Draft Regulatory Impact Analysis

The commission adopts the rulemaking under 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 act. "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 adopted rules in Chapter 336 are 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

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imposed on radioactive material licensees. The commission adopts these rules 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 adopted rules also add definitions and implement a statutory prohibition on the receipt and disposal of waste of international origin.

Furthermore, the adopted rules do 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 adopted rules do 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

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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 adopted rules do not exceed the standards set by federal law. The adopted rules implement new requirements in state statutes enacted in SB 1504.

The adopted rules do 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 adopted rules do 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 adopted rules do not exceed the NRC's requirements nor exceed the requirements for retaining status as an

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Agreement State.

The commission also determined that the rule 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 invited public comment regarding the draft regulatory impact analysis determination during the public comment period. One comment was given by *EnergySolutions*, stating disagreement with the TCEQ determination that the proposed rule is not a major environmental rule. *EnergySolutions* reasoning was, since the proposed rule will have a direct negative financial effect on generators in the "Compact", who will now be required to either increase disposal costs for waste sent to the Regional Compact Facility at an undetermined cost or pay significant surcharges in order to meet the new criteria proposed in the rule. *EnergySolutions* stated that the increased costs to Texas generators and increased occupational radiation exposure to process workers, due to this 5% radioactivity commingling rule, was not included in the benefit analysis developed for the rule.

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Takings Impact Assessment

The commission evaluated these adopted rules and performed a preliminary assessment of whether the adopted 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 adopted rules also add definitions and implement a statutory prohibition of the acceptance and disposal of waste of international origin.

Promulgation and enforcement of the adopted rules would be neither a statutory nor a constitutional taking of private real property because the adopted rules do not affect real property. Because the adopted 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 adopted 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 adopted rules will not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rules and determined that the rule is neither

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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.

The commission invited public comment regarding the consistency with the coastal management program during the public comment period. Comments were not received on the Coastal Management Program.

Public Comment

The commission held a public hearing on January 12, 2012. The comment period closed on January 23, 2012. The commission received comments from Waste Control Specialist (WCS), EnergySolutions, Studsvik, Advocates for Responsible Disposal in Texas (ARDT), Entergy Services, Inc. representing Vermont Yankee, Cox, Smith, and Matthews (CSM) representing the South Texas Project Nuclear Operating Company, Luminant Power, which owns and operates Comanche Peak Nuclear Power Plant, the Southeast Compact Commission, the Sustainable Energy and Economic Development (SEED) Coalition, Texas Radiation Advisory Board (TRAB), and Robert Singleton representing himself. The commission has been working in coordination with the TLLRWDC on this rulemaking through an appointed TLLRWDC Rules Committee. Comments have been received and discussed with the TLLRWDC as part of the

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commission's coordination efforts. One comment received supported the rulemaking, eight comments received were against the rulemaking, and nine, including the TLLRWDC, suggested changes.

Response to Comments

Comments on Definitions

~~WCS, CSM, Studsvik, and ARDT commented that the rules should be clear that commingling of party state compact waste with other party state compact waste from several generators be allowed. TLLRWDC recommended that party state waste generators attempt to intentionally commingle, or otherwise batch, their LLRW to reduce the probability of incidental commingling at the processor site. TLLRWDC also recommended that the preamble include discussion of the differences between intentional commingling of party state waste sources and the intentional commingling of party and nonparty waste streams. WCS stated that the following sentence—"In general, intentional commingling of LLRW from more than one generator is prohibited in order to attribute each waste shipment to a specific generator."—in the third paragraph of the section "Public Benefits and Costs" be removed or changed to clarify that this rule does not limit the commingling of waste from two party state compact waste generators. WCS commented that the definition of commingling in §336.702(6) be changed to clarify that this definition only applies to the commingling of party state compact waste with waste from other sources. ARDT commented that §336.745(d)(2)~~

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~~should be changed to allow the acceptance for disposal of waste from different party state compact waste generators that were commingled at a commercial processing facility and also to provide a method for commingled compact waste to be documented and attributed to the actual generator for tracking and pricing purposes.~~

Rather than change the definition of commingling, the commission adopts an applicability subsection in new §336.745(a) to explain that the limitations and thresholds established in the section only limit the incidental commingling of party state compact waste with waste from other sources and do not apply to party state compact waste that is commingled with other party state compact waste or waste that is subject to an agreement for importation into the Texas Compact by the Texas Low-Level Radioactive Waste Compact Commission.

~~In response to comments, the rule has been revised to add a statement on applicability (§336.745(a)) to clarify that commingling of party state compact waste with other party state compact waste from several generators is allowed. The sentence in "Public Benefits and Costs" cannot be altered since this section does not appear in the adoption preamble. The commission has added discussion in Section By Section of the preamble on variations of intentional commingling of waste. The commission believes~~

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~~the new applicability rule in §336.745(a) is sufficient, and that the definition in §336.702(6) and that §336.745(d)(2) do not need to be changed to clarify this position. The thresholds and criteria established in §336.745 do not apply to party state compact waste that is commingled with other party state compact or waste that is subject to an importation agreement for disposal in Texas by the TLLRWDC.~~

ARDT and CSM commented that waste generated from outside the Compact, that is approved by the TCEQ and the Compact Commission for importation and disposal in the Texas Compact Waste Disposal Facility should become "compact waste" and therefore allowed to be commingled with party state compact waste without limitation, with the criteria that the out-of-compact importer will still pay the import rate, only import the amount that was authorized by the TLLRWDC, and the waste will be examined as being compatible for disposal at the facility. ARDT and CSM commented that the definition of "party state compact waste" should consequently be removed and replaced with the following definition for the new term "compact waste", which is from THSC, §401.2005(l): "Compact waste – Low-level radioactive waste that, (A) is generated in a host state or a party state or, (B) is not generated in a host state or a party state but has been approved for importation to this state by the compact commission under Section 3.05 of the compact established under Section 403.006 Texas Health and Safety Code." ARDT and CSM commented that, based on this change, the phrase "party

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state" should be removed from the following rules: §§336.702(16), 336.702(27), 336.745(a), 336.745(b), 336.745(c), 336.745(d)(2), and 336.745(d)(3). CSM stated that, based on this change, §336.745(a) should be removed in entirety.

~~Based on discussions with the TLLRWDC, the commission agrees that the intentional commingling of party state compact waste and non party waste that is subject to an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal should be avoided due to the complication to importation decisions by the TLLRWDC. The commission does not agree with the suggestion to remove the definition of "party state compact state waste" and use "compact waste," instead. The limitations on incidental commingling of waste established in this rulemaking do not apply to waste that is approved for importation for disposal in the Texas Low-Level Radioactive Waste Disposal Compact by the TLLRWDC. In~~
response to comments, a new §336.745(a), titled "Applicability", was added to the rule to clarify conditions of commingling that apply to the rule and to recognize that waste may be subject to ~~the weight of the~~ terms of an agreement with the TLLRWDC on imported waste. The commission believes that these changes are sufficient to clarify this position: thus the definition of party state compact waste does not need to be modified; the term "party state compact waste" does not need to be to changed to

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"compact waste"; and ~~that the~~ proposed §336.745(a), now §336.745(b), does not need to be removed. The definition of "party state compact waste" is consistent with the definition in TRCA.

WCS commented that the definition of commercial processing in §336.702(5) should have the terms "storage" and "transfer" removed since storage and transfer refer to the movement of containers and does not require handling or manipulation of the radioactive material.

The commission respectfully does not agree with this comment. The definition of processing in §336.1203(9) includes storage and transfer as being part of processing. This processing definition is also consistent with the statutory definition in THSC, §401.003(16). No changes have been made in response to this comment.

WCS commented that the phrase "Any mixing, blending, down-blending, diluting, or other" should be removed from the definition of commingling in §336.702(6) because listing the processes in §336.702(6) is redundant since the processes are listed in the commercial processing definition at §336.702(5). WCS stated that including dilution in the commingling definition is confusing since dilution is prohibited by §336.229. ARDT commented that the words "down-blending" and

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"diluting" should either be removed from the commingling definition or change the definition should be changed to explain why down-blending and diluting are included in the definition.

The commission agrees that the attempt to provide descriptors in the proposed ~~commingling~~ definition of commingling added confusion. In response to comment, §336.702(6) has been modified by replacing "mixing, blending, down-blending, diluting, or other processing" with "process."

The Southeast Compact Commission commented that the definition of "commingling" in §336.702(6) should be modified as "any unintentional mixing, blending or diluting that combines radioactive substances from two or more generators as a result of commercial processing of radioactive substances." The TLLRWDCG commented that "incidental commingling" and "intentional commingling" should be further discussed and defined. This discussion should clearly identify the difference between the intentional commingling of party state LLRW versus the intentional commingling of non-party and party wastes.

~~Commingling can be incidental, yet with known consequences.~~

Commingling can be intentional or unintentional. This rulemaking

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addresses incidental commingling of party state compact waste with waste from other sources, as required by SB 1504. For purposes of this rulemaking, incidental means unavoidable or otherwise unintentional actions that prevent party state compact waste from being kept separate from waste from other sources because of undue risk to occupational or public health and safety and the environment. This rulemaking does not address intentional commingling of waste, which could be accepted for disposal into the compact disposal facility if all of the waste were generated in a party state or approved for importation for disposal by the TLLRWDC. In response to comment, a discussion has been added in Section By Section of the preamble on variations of intentional commingling of waste. Additionally, the definition of incidental was modified to clarify that commingling was the result of unavoidable or otherwise unintentional actions.

The Southeast Compact Commission states that the proposed definition of "incidental" in §336.702(16) is unclear and misleading and suggests using the dictionary definition for incidental: "accompanying but not a major part of something" or "liable to happen as a consequence."

The commission respectfully does not agree with this comment.

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~~Whether the commingling is or is not a major part will be defined elsewhere in §336.745(g) in regard to the commingling thresholds and criteria.~~ The suggested definitions proffered by the Southeast Compact Commission are not sufficient to determine readily whether or not commingling is incidental; they are too ambiguous. **The definition of "Liable to happen as a consequence" does not differentiate between intentional or unintentional which is an important aspect of processing decisions and of SB 1504. The association in the definition to undue risk to occupational or public health and the environment should be familiar to licensees who practice "ALARA" (as low as reasonably achievable) principles encouraged by the NRC and Agreement States for safe radiation protection programs. No changes have been made in response to this comment.**

ARDT and CSM commented that the commission should clarify why "containerized class A waste" (§336.702(7)) is the only waste type defined in the rules.

The definition of "Containerized Class A Waste" was already present in Subchapter H before this rulemaking for other licensing considerations and was not proposed for change as part of this rulemaking. It is a category of Class A that is subject to special requirements under a disposal license

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issued under Subchapter H of Chapter 336. No changes have been made in response to this comment.

TRAB commented that the regulations should include a definition of a waste generator.

The radioactive substances rules define waste generator in §336.1303(7). A generator is defined as a "person, partnership, association, corporation, or any other entity whatsoever that, as part of its activities, produces low-level radioactive waste and is subject to the Compact." This definition has not been proposed to change. No changes have been made in response to this comment.

Comments on Limitations of Incidental Commingling

WCS, CSM, Studsvik, and ARDT commented that the rules should be clear that commingling of party state compact waste with other party state compact waste from several generators be allowed. TLLRWDC recommended that party state waste generators attempt to intentionally commingle, or otherwise batch, their LLRW to reduce the probability of incidental commingling at the processor site. TLLRWDC also recommended that the preamble include discussion of the differences between intentional commingling of party state waste sources and the intentional commingling of party and nonparty waste streams. WCS stated that the following sentence – "In

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general, intentional commingling of LLRW from more than one generator is prohibited in order to attribute each waste shipment to a specific generator." - in the third paragraph of the section "Public Benefits and Costs" be removed or changed to clarify that this rule does not limit the commingling of waste from two-party state compact waste generators. ARDT commented that §336.745(d)(2) should be changed to allow the acceptance for disposal of waste from different party state compact waste generators that were commingled at a commercial processing facility and also to provide a method for commingled compact waste to be documented and attributed to the actual generator for tracking and pricing purposes.

In response to comments, the rule has been revised to add a statement on applicability (§336.745(a)) to clarify that commingling of party state compact waste with other party state compact waste from several generators is allowed. The sentence in "Public Benefits and Costs" cannot be altered since this section does not appear in the adoption preamble. The commission has added discussion in the Section By Section of the preamble on variations of intentional commingling of waste. The commission believes the new applicability rule in §336.745(a) is sufficient, and that the definition in §336.702(6) and that §336.745(e)(2), do not need to be changed to clarify this position. The thresholds and criteria established in §336.745 do not apply to party state compact waste that is commingled with

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other party state compact waste or waste that is subject to an importation agreement for disposal in Texas by the TLLRWDC.

WCS commented that it supports the incidental commingling limit of 5% by radioactivity since a higher limit could allow nonparty state waste to be disposed in the Compact Waste Facility at compact rates and without the additional 20% surcharge that is applicable to all nonparty state waste.

The commission has modified the 5% by radioactivity limitation, based on the comments that such a limit is not technically practical for the processing of waste from party state generators and falls short of providing thresholds and criteria by waste stream. The incidental commingling thresholds and criteria are still designed to minimize as far as practical the amount of nonparty state waste being disposed in the Compact Waste Disposal Facility (without approval for importation for disposal by the TLLRWDC), while allowing for the benefits ~~to~~ of processing to be realized.

ARDT, Entergy Services, EnergySolutions, the Southeast Compact Commission, and CSM commented that the 5% by radioactivity limit is arbitrary, unreasonable, technically impractical, would result in the disposal of as-generated volumes instead of as-processed volumes, which would consequently decrease the available volume in the

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Compact Waste Disposal Facility, limit treatment options, would result in higher costs, and would increase the radiation exposure and other safety issues to workers. Studsvik, ARDT, Entergy Services, EnergySolutions, and CSM commented that the 5% by radioactivity limit should be either higher or based on volume or mass instead of radioactivity. TLLRWDC recommended that the limits be modified and based on waste streams and radionuclides of concern rather than a percentage of total radioactivity. TLLRWDC also recommended that some waste classification or waste streams, however, should have limits based on radioactivity (i.e., Class C LLRW such as nuclear power plant resins).

Studsvik commented that using volume as the unit of measure creates more certainty, improves compliance and recordkeeping accuracy, reduces operational burdens, and minimizes worker dose. Studsvik commented that through its operational knowledge, it is confident that it can meet a 5% by volume commingling limitation. Studsvik stated that that the rule could recognize the challenges of radioactivity measurement under certain conditions and allow for alternatives to that requirement while remaining faithful to the intent of SB 1504.

EnergySolutions commented that qualitative controls (i.e., simple segregation for sequencing processing by point-of-origin) are adequate and that qualitative evaluations of potential cross-contamination should be considered for full inventories to be

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campaigned, not individual packages. EnergySolutions also commented that §336.745(e)(3)(B) should be removed.

The Southeast Compact Commission commented that the 5% limit is impossible to demonstrate.

ARDT commented that the rule goes "too far" and would treat waste generated in Texas or Vermont as if it is imported waste if it experiences commingling of more than 5% of the total radioactivity with out-of-Compact waste at commercial processing facilities.

ARDT ~~provided~~ suggested language that "the processor shall certify to TCEQ that the waste has not been downblended or blended, mixed or commingled with LLRW that was not generated in the party states except for waste incidental to the use of commercial processing facilities."

The Southeast Compact Commission commented that TCEQ should consider an alternative to the 5% radioactivity limitation as an approach for the limitation of incidental cross-contamination at commercial processing facilities.

EnergySolutions, Entergy Services, CSM, and ARDT commented that the reasonable fraction of commingling is dependent on the processing technique used and that the rule should be based on the type of processing or treatment that the waste has undergone

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and the volume, mass, form, and concentration of the waste involved.

~~The commission has modified the 5% by radioactivity rule based on the comments that such a limit is not technically feasible. Waste processing can be divided into specific waste stream categories according to waste type and waste processing. DAW or compatible trash is low radioactivity and is typically processed through incineration, and possibly supercompaction of the resulting radioactive ash. Resins typically have high radioactivity values and are treated using other techniques, such as the THOR[®] process by the Studsvik facility in Erwin, Tennessee. The commission respectfully disagrees with the comments that the rule should have exclusively qualitative limits instead of quantitative limits. The commission has modified the rule so that the commingling limits are still quantitative, but set technically achievable commingling limits per waste streams in recognition of the waste process that will limit the amount of waste from other sources being commingled with party state compact waste.~~

The commission respectfully disagrees with the complete removal of radioactivity as a unit of measure concerning commingling limits although understands the concerns with a 5% limit. The commission does agree that volumetric limits should also be utilized for measuring commingling. The radioactive disposal license for the Compact Waste Disposal Facility

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imposes volumetric and radioactivity limits for waste that may be accepted for disposal. Therefore, both the volume and the radioactivity added by waste to the Compact Waste Disposal Facility due to incidental commingling must be restricted due to their potential impact to license limitations. The commission has modified the 5% by radioactivity rule based on comments that such a limit is not technically feasible. Waste processing can be divided into specific waste stream categories according to waste type and waste processing. DAW or compactable trash is low radioactivity (Class A LLRW) and is typically processed through compaction and incineration, and possibly supercompaction of the resulting radioactive ash. Resins typically have high radioactivity values (Class B/C LLRW) and are treated using other techniques, such as the THOR[®] process by the Studsvik facility in Erwin, Tennessee. The radioactivity commingling limits have been modified so that there are separate limits for Class A and Class B/C LLRW. Class B/C LLRW has a 10% total radioactivity commingling limit and Class A has two limits: commingling may not exceed 0.05 microcurie (1.85 kilobecquerels) per gram or 10% of the concentration limit for Class A LLRW consistent with radioactivity levels in §336.362. Class A LLRW limits for incidental commingling are structured so that waste classification does not change and extends the use of existing concentration limits in TCEQ rules for other LLRW streams. The different approach for

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Class A LLRW is in recognition of the different physical properties and radioactivity levels of Class A LLRW up to the Class A limit and its subsequent processing. The 0.05 microcurie per gram limit was based on the exemption limits for specific radionuclides in §336.225(a). Class B/C LLRW radioactivity is necessarily limited for incidental commingling due to the potential impact of this higher radioactivity to the license limitations. The commission respectfully disagrees with the comments that the rule should have exclusively qualitative limits instead of quantitative limits. The commission has modified the rule so that the commingling limits are still quantitative, but set technically achievable commingling limits per waste stream in recognition of the waste process that will limit the amount of waste from other sources being commingled with party state compact waste. Waste streams identified in the rule are DAW, compactable trash, nuclear utility resins, and nuclear utility filters for Class A LLRW and nuclear utility resins and filters for Class B/C LLRW. If a particular waste stream is not identified in the rule, adopted §336.745(g)(6), limits the waste from other sources in that waste to a percentage by volume, weight, total radioactivity, and concentration limits.

The SEED Coalition and Robert Singleton commented that the 5% limit should be reduced to 1% of radioactivity since it is more protective, that a high commingling

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radioactivity limit may result in commingling becoming a standard business practice instead of incidental, and that the health and safety of Texas should be considered above processing and disposal costs. The SEED Coalition also stated that an additional cap by volume should be incorporated into the rule.

The commission respectfully disagrees with this restrictive limitation. A limit of 5% or 1% by radioactivity has been shown to be technically unachievable without a significant increase in cost and radiation exposure to workers at processing facilities. If thresholds and criteria are restrictive, beneficial processing to reduce waste volume or improve waste form may not be performed resulting in a decrease in the available disposal volume at the Compact Waste Disposal Facility. The commission believes that the revised commingling limits by waste streams and the additional required certifications will minimize, to the extent achievable, the amount of waste from other sources being commingled with party state compact waste.

ARDT commented that the commingling limit should be applied to the raw, pre-processed waste as it is placed as feed stock to waste treatment equipment and that any further commingling would represent only machine residues that can be expected to be incidental quantities in both volume and radioactivity content.

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The commission agrees that the commingling limit should apply to the raw, pre-processed waste as it is placed as feed stock to waste treatment equipment. Radionuclide inventories should be certified before the waste is processed. Pre-sorting to this waste stream would reduce the waste entering the processing unit or piece of processing equipment where commingling is unavoidable. In response to comment, a new requirement and certification has been added to the reporting that identifies the waste inventory at two points - upon entering as well as exiting a processing unit or piece of processing equipment where incidental commingling may occur.

ARDT stated that the rule must have reasoned justification in accordance with Texas Government Code, §2001.033 and that the commission should provide the legal and technical basis for limiting commingling at 5% ~~five percent~~ of total radioactivity in the rulemaking preamble.

The commission believes that it has provided the reasoned justification for this rulemaking. The originally proposed 5% of total radioactivity commingling limit has been modified in response to comments, this comment is addressed by that change in rule language. The commission has explained the rationale for the various thresholds and criteria established in §336.745(g).

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WCS commented that the report submittal time in §336.745(d)(1), now re-lettered as subsection (e)(1), should be changed from ten days prior to receipt to five days prior to receipt to coincide with WCS's waste acceptance process and shipment request process which has a five-day advance.

Approved Waste Acceptance Criteria in the license for the Compact Waste Disposal Facility, the TCEQ Waste Shipment Verification Form, and WCS procedures require that information on waste shipments be submitted to WCS and the TCEQ at least five days prior to planned receipt of waste. The commission agrees with the comment and to maintain consistency §336.745~~(d)~~(e)(1) will be changed to reflect at least a five-day advance submittal time instead of ten days.

WCS and EnergySolutions commented that in proposed §336.745(d)(2), now re-lettered as subsection (e)(2), the word "waste" should be added after the phrase "party state compact" and the phrase "that has" is repeated and should be corrected.

The proposed rules published in the *Texas Register* do not have these errors. The commentators may have been reading an earlier draft version of the preamble and not the version proposed in the *Texas Register*. No

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changes have been made in response to this comment.

WCS commented that §336.745(d)(2), now re-lettered as subsection (e)(2), should be rewritten to the following: "If commercially processed waste from other sources has not been commingled with party state compact waste the processor and licensee shall only be required to certify that waste from other sources has not been commingled with party state compact waste."

The commission respectfully disagrees with this suggested rewriting of §336.745~~(d)(2)~~(e)(2). If a processor has only processed party state compact waste, the rules as adopted are sufficient to allow the processor to certify that there would be no waste from other sources commingled with the party state compact waste. The commission has revised the rule to require a certification that there is no commingling of waste of international origin.

No changes have been made in response to this comment.

EnergySolutions commented that §336.745 is specific to waste sent for processing and then returned for disposal at the compact facility, but should be changed to include waste exported for processing and subsequent disposal at a non-compact facility.

The commission respectfully disagrees with this comment. This

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rulemaking is based on SB 1504 which is concerned only with the disposal of waste in the Compact Waste Disposal Facility. The inclusion of waste exported from the TLLRWDCG for disposal in a non-compact facility is outside the scope of this rulemaking and the authority of the commission. Export of party state compact waste is under the authority of the TLLRWDCG and appropriate terms may be added by the TLLRWDCG with approval to export for processing. No changes have been made in response to this comment.

ARDT commented that §336.745 should include provisions for disposal of waste that has been processed at a "certified" waste processor. ARDT stated that the processes and procedures utilized at the facilities of a "certified" waste processor could be initially and subsequently periodically audited by the TCEQ, or an independent authority, to verify that waste treated at their facility complies with TCEQ rules for waste form, stability, packaging and commingling. ARDT also commented that waste shipments from a certified waste processing should not require advance notification of waste shipments by the licensee to TCEQ.

Certification of waste processors outside of Texas is not within the jurisdiction of the commission. The commission has authority over what waste will be placed in the Compact Waste Disposal Facility and each waste

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shipment must be approved and accepted by the commission's resident inspectors. The waste manifest will be examined and if the waste does not meet the license and ~~it's~~ the approved waste acceptance criteria, it will be rejected. Waste processed at a commercial processing facility is subject to the reporting requirements of §336.745(e) and, if it includes incidentally commingled waste from other sources, it must meet the criteria and thresholds of subsection (g). No changes have been made in response to this comment.

The SEED Coalition commented that the proposed rule provides no oversight to ensure that processors comply with the TCEQ policy and no penalties for violating it; therefore, the rule should include significant penalties and establish an enforcement mechanism for processors who inaccurately assess or falsely report the amount of commingled waste.

The commission does not have jurisdiction over waste processors that are outside of Texas and thus, is not able to provide oversight or enforce penalties. The commission has authority to accept or reject any waste shipment for disposal in the Compact Waste Disposal Facility. Each waste shipment must be approved by the commission's resident inspectors who will examine the waste manifest. If the waste disposal licensee is receiving

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waste processed at a commercial processing facility, there are reporting requirements under §336.745(e) and, if the commercially processed waste includes incidentally commingled waste from other sources, the waste from other sources must meet the criteria and thresholds of §336.745(g).

Deliberate falsification of information on the waste manifest or other reports submitted to the agency may be is a criminal violation and may be subject to enforcement. No responses have been made in response to this comment.

ARDT commented that TCEQ should consider adding language that would exempt certain types of waste, such as DAW, from the commingling rule that fall below a certain volume, mass or radioactivity threshold.

The commingling limitations have been modified and are specific to the waste type.

WCS commented that party state compact waste may be subject to importation and out of compact disposal rates due to insufficient data to certify that commingling above the 5% radioactivity limit has~~ed~~ not occurred. WCS stated that the certifications required to comply and properly document that the waste meets the criteria of §336.745(d)(3), now re-lettered as subsection (e)(3), are heavily dependent on the information provided by

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the generator and/or commercial processor and requires WCS to take on additional liability. Therefore, WCS will require its own certifications and supporting documentation by the original generator and ~~that~~ it expects resistance from the processors in providing this information about their customers to WCS. WCS stated that the following verbiage should be added to the rule: "If incidental commingling of waste during commercial processing results in a contribution of more than 5% of the total radioactivity from waste from other sources, the generator and/or waste processor is unable to definitively determine the contribution from waste from other sources, or the commingling was not incidental, then the generator must follow the process for importation approval of the waste and that waste shall be subject to out of compact disposal rates."

If waste from other sources is commingled with compact state party waste and cannot meet the reporting or threshold requirements of §336.745, the generator of the waste from other sources, or other persons as determined by the TLLRWDC, may seek an agreement from the TLLRWDC for the importation of the waste into Texas for disposal. ~~The acceptance of the title to waste to be placed for disposal in the Texas Compact Waste Disposal Facility is the responsibility of the State of Texas. Whether waste is party state compact waste or must be imported under agreement by the TLLRWDC, due to commingling, will be decided by the commission and/or~~

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~~the TLRWDCC.~~ **No changes have been made in response to this comment.**

ARDT commented that generators should not be forced to sign documents for waste enroute to the compact facility after processing, but that the processor should complete and sign these documents since the processors understand their abilities and techniques.

This rulemaking does not require generators to sign documents for waste enroute to the Compact Waste Disposal Facility after processing. The licensee in §336.745~~(d)~~(e), who is required to file the report described in this rule, is the operator of the Compact Waste Disposal Facility who has a commercial radioactive waste disposal license and not the generator. No changes have been made in response to this comment.

ARDT stated that the processor should have the responsibility to notify the generator of the post processing results for their waste, such as volume and radioactivity prior to being shipped to obtain concurrence from the generator.

It is not within the jurisdiction of the commission to require a processor outside of Texas to notify the generator. In order for commercially processed waste to be acceptable for disposal at the compact waste disposal

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facility, generators and commercial processors should have understanding of these rules to assure that the reporting requirements and limitations can be met. It is the generator's responsibility to ensure that rules can be met prior to making a decision to process their waste. No changes have been made in response to this comment.

WCS commented that §336.745(d)(3)(B) and (C), now re-lettered as subsection (e)(3)(B) and (C), do not provide any guidance of waste streams that do not meet, or cannot be proven to meet, the incidental commingling criteria, and the language should be changed to more clearly show the intent of these two sections.

The modification of the commingling limitation based on waste streams found in the adopted §336.745(g) should supply the requested guidance and clarification on the thresholds and criteria to limit specific waste streams. If waste from other sources is commingled with compact state party waste and cannot meet the reporting or threshold requirements of §336.745, the generator of the waste from other sources, or other persons as determined by the TLLRWDC, may seek an agreement from the TLLRWDC for the importation of the waste into Texas for disposal.

The SEED Coalition and Robert Singleton commented that a provision should be

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included in the rule that prohibits waste to be disposed of in Texas, or returned to the state, if it has been processed by any processor that accepts international waste or until the processor can certify that no international waste could get commingled with the compact waste. *EnergySolutions* commented that it would certify wastes processed at their facility from the TLLRWDC as having no international component.

The commission respectfully disagrees with the comments that waste processed at a facility that had processed any international waste should be automatically rejected from being disposed in the Compact Waste Disposal Facility. Processing international waste is uncommon in the United States and waste processors are able to certify that no international waste has been commingled with domestic waste. To clarify the prohibition in this rule, a provision has been added requiring a certification that party state compact waste has not been commingled with waste of international origin.

EnergySolutions commented that requiring waste generators in the Texas Compact to obtain an export permit before making arrangements to process LLRW at facilities located outside of the Texas Compact could impair the rights of parties to existing contracts by restricting future exports of LLRW to the processing facilities and would act to penalize *EnergySolutions* and its processing facilities. *EnergySolutions* stated that the following sentence be added to §336.745: "The existence of an agreement governing

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the export for processing of waste at a facility outside of the Texas Compact that was entered into prior to the adoption of these regulations governing 'Exportation of Waste for the purposes of processing,' in which case this factor shall be dispositive so as to authorize the Export Permit."

Export permits for party state compact waste to be processed outside of Texas or Vermont is the jurisdiction of the TLLRWDC and thus, the commission is not able to address this comment in this rulemaking. No changes have been made in response to this comment.

~~The TRAB commented that the regulations should include a definition of a waste generator.~~

~~The radioactive substances rules define waste generator in §336.1303(7). A generator is defined as a "person, partnership, association, corporation, or any other entity whatsoever that, as part of its activities, produces low level radioactive waste and is subject to the Compact." This definition has not been proposed to change. No changes have been made in response to this comment.~~

The TRAB commented that the preamble should include a discussion of sealed sources

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that might be subject to processing. The TLLRWDC commented that sealed source should be defined and that sealed sources should not be processed to destroy or intentionally degrade the physical attributes of the source and therefore, should be addressed as a waste stream subject to incidental commingling.

The definition for sealed sources is found in radioactive substance rules at §336.1(122) as follows: "Sealed source--Radioactive material that is permanently bonded or fixed in a capsule or matrix designed to prevent release and dispersal of the radioactive material under the most severe conditions that are likely to be encountered in normal use and handling." The commission intends that sealed sources would not be processed in a manner that would have the possibility of the sealed source being incidentally commingled with other waste. The commission has added a certification requirement to the rule to address this comment.

The TRAB commented that the regulations should state when a radioactive substance becomes a waste.

Part of the definition of waste in §336.2(77)(A)(i) is that waste is discarded or unwanted. This is a determination made by the licensed possessor of a radioactive substance at the time that a substance is no longer useful or

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when a substance can no longer be put to practical beneficial use. The commission does not have authority to declare timing of when a radioactive substance becomes a waste, if the substance is discarded or unwanted in a state other than Texas, or even by a Texas radioactive material licensee if licensed by the Department of State Health Services. If the substance is declared and/or manifested as a waste, then the commission would consider it a waste. No changes have been made in response to this comment.

The TRAB commented that this rulemaking should include clarification on how the 5% by radioactivity incidental commingling rule would be applied to the introduction of a new radionuclide to a waste, compared to how the rule applies to a radionuclide already in the waste that is increased in radioactivity due to incidental commingling.

The commission appreciates that distinction made by the TRAB. The 5% by radioactivity incidental commingling rule that was proposed was for total radioactivity and was not determined per radionuclide. The proposed commingling limits have been modified and now include limits based on total radioactivity and the concentration values of specified radionuclides.

EnergySolutions commented that it disagrees with the TCEQ determination that this

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proposed rule is not a "major environmental rule" since the proposed rule will have a direct negative financial effect on generators in the compact, who will now be required to either increase disposal costs for waste sent to the Regional Compact Facility at an undetermined cost or pay significant surcharges in order to meet the new criteria proposed in the rule. *EnergySolutions* stated that the increased costs to Texas generators and increase occupational radiation exposure to process workers due to this 5% radioactivity commingling rule was not included in the benefit analysis developed for the rule.

The adopted rules have been revised from proposal to establish different limitations specific to waste stream type for party state compact waste commingled with waste from other sources. As explained in the Final Regulatory Impact Analysis, the commission determined that this rulemaking is not a major environmental rule. If waste from other sources, that is commingled with party state compact waste, cannot meet the limitations established in these rules, the generator of the waste from other sources, or other persons as determined by the TLLRWDC, can seek an agreement from the TLLRWDC to allow importation of the waste to Texas for disposal at the Compact Waste Disposal Facility.

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**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 adopted 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 adopted 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

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water code and other laws of the state.

The adopted 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,

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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

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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 process 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.

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(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.

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(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--**Unavoidable or otherwise Un**unintentional actions that, with respect to commingling of waste, prevents 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.

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(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

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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.

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

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(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) Applicability. This section does not limit party state compact waste that is commingled with other party state compact waste during processing nor low-level radioactive waste that is subject to an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission for the importation of low-level radioactive waste into the compact for disposal ~~that is commingled with other low-level radioactive waste that is also subject to an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission for the importation of low-level radioactive waste into the compact for disposal.~~ The terms of an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission may provide requirements for any processed waste. Acceptance and disposal of waste for all sources by the licensee is limited to the waste specifically authorized by the license issued under this chapter.

(b) ~~(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

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been commingled at a commercial processing facility with waste from other sources except as provided in this section.

(c) ~~(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 **that does not** ~~if the radioactivity of the waste from other sources~~ exceed **the thresholds and criteria established in subsection (g) of this section** ~~5% of the total activity of the commingled waste.~~

(d) ~~(e)~~ 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 **and processing has not altered the waste class in accordance with §336.229 of this title (relating to Prohibition of Dilution).**

(e) ~~(f)~~ **No less than five** ~~10~~ days prior to the receipt **by the licensee** 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

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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, including commingling with waste of international origin ~~except for commingling incidental to processing, and that the radioactivity content of waste from other sources does not exceed 5% of the total activity; 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 and certify the waste inventory from a party state compact generator at the point of waste entrance into and exit from a processing unit or piece of processing equipment where it has been commingled with ~~each generator of the waste from other sources by name, address, and license number;~~

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(B) certify that the radioactivity content of waste from other sources does not exceed the thresholds and criteria established in subsection (g) of this section 5% of the total activity of the commingled waste and provide documentation of how compliance with the thresholds and criteria in subsection (g) of this section the radioactivity content was were 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.

(D) certify that no waste of international origin was either intentionally or unintentionally commingled and that no nonparty compact waste was intentionally commingled with party state compact waste during processing.

(E) certify that processed waste meets the requirements of §336.229 of this title.

(F) certify that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing.

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

(g) Waste streams allowed for acceptance for disposal by the licensee are specifically authorized by the disposal license issued under this chapter. Waste from other sources that is incidentally commingled with compact party state waste may not exceed the thresholds and criteria established in the subsection.

(1) Dry Active Waste or Compactable Trash. Authorized common trash, Class A low-level radioactive waste—after processing, waste from other sources may not exceed 10% of the total weight of the processed waste. The radioactivity of waste from other sources may not exceed:

(A) 0.05 microcurie (1.85 kilobecquerels) for any radionuclide per gram; or

(B) 10% of concentration limit for Class A low-level radioactive waste consistent with §336.362, of this title (relating to Appendix E. Classification and Characteristics of Low-Level Radioactive Waste).

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(2) Nuclear Utility Resins. Authorized Decontamination, Demineralization, or Secondary System Resins, Class A low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% of the total weight of the processed waste. The radioactivity of waste from other sources may not exceed:

(A) 0.05 microcurie (1.85 kilobecquerels) for any radionuclide per gram; or

(B) 10% of concentration limit for Class A low-level radioactive waste consistent with §336.362, of this title.

(3) Nuclear Utility Resins. Authorized Decontamination, Demineralization, Clean-up, or Secondary System Resins, Class B or C low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% of the total volume and radioactivity of the processed waste.

(4) Nuclear Utility Filters. Authorized filters and associated waste, Class A low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% by total weight of the processed waste. The radioactivity of waste from other sources may not exceed:

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(A) 0.05 microcurie (1.85 kilobecquerels) for any radionuclide per gram; or

(B) 10% of concentration limit for Class A low-level radioactive waste consistent with §336.362, of this title.

(5) Nuclear Utility Filters. Authorized filters and associated waste, Class B or C low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% by total volume and radioactivity of the processed waste.

(6) For waste streams not identified in paragraphs (1) - (5) of this subsection. If other waste streams are processed with incidental commingling of waste from other sources, these waste streams must be specifically identified and fully described in the report submitted under subsection (e) of this section. After processing, the waste from other sources may not exceed 10% by total volume, total weight, total radioactivity, and if classified as Class A low-level radioactivity waste, may not exceed 10% of the concentration limit for Class A low-level radioactive waste consistent with §336.362 of this title.

(7) For all waste streams. If new radionuclides are introduced through incidental commingling at a commercial processing facility, these must be

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specifically identified and may not result in a change in waste class or increased health and safety risks for handling and disposal of the processed waste.

§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.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AGENDA ITEM REQUEST
for Rulemaking Adoption

AGENDA REQUESTED: May 16, 2012

DATE OF REQUEST: April 27, 2012

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Bruce McAnally, (512) 239-2141

CAPTION: Docket No. 2011-1905-RUL. Consideration of the adoption of amendments to Section 336.702 and of new Sections 336.745 and 336.747 of 30 TAC Chapter 336, Radioactive Substance Rules.

The rulemaking revises the commission's radiation control rules to implement Senate Bill 1504, 82nd Legislature, 2011, Regular Session. The rulemaking establishes requirements at the licensed low-level radioactive compact waste disposal facility for the disposal of party state compact waste that has been commingled with waste from other sources at a commercial waste processing facility. The rulemaking also adds definitions and prohibits the receipt and disposal of waste of international origin. The proposed rules were published in the December 23, 2011, issue of the *Texas Register* (36 TexReg 8725). (Hans Weger, Don Redmond) (Rule Project No. 2011-036-336-WS)

Ashley Forbes for Brent Wade
Deputy Director

Susan Jablonski
Division Director

Bruce McAnally
Agenda Coordinator

Copy to CCC Secretary? NO

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** April 27, 2012

Thru: Bridget C. Bohac, Chief Clerk
Mark Vickery, P. G., Executive Director

From: Brent Wade, Deputy Director
Office of Waste

Docket No.: 2011-1905-RUL

Subject: Commission Approval for Rulemaking Adoption
30 TAC Chapter 336, Radioactive Substance Rules
SB 1504: Phase I
Rule Project No. 2011-036-336-WS

Background and reason(s) for the rulemaking:

The revisions in Texas Health and Safety Code (THSC), §401.207 implemented in this rulemaking address the availability and reservation of disposal capacity in the Compact Waste Disposal Facility for low-level radioactive waste (LLRW) generated in a party state to the Texas Compact and the realities of commercial radioactive waste processing activities where party state compact waste may become commingled with waste from other sources.

Senate Bill (SB) 1504, 82nd Legislature, 2011, revised THSC, §401.207 to require the commission to adopt rules that 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. SB 1504 also adds new definitions in THSC, §401.2005 and prohibits the acceptance of waste of international origin in THSC, §401.207. The commission is required to coordinate its rulemaking with the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDC), but any criteria and thresholds established by the commission rule are binding on any criteria and thresholds established by the TLLRWDC.

Other provisions of SB 1504, including the setting of interim disposal rates, commission studies, and imposition of fee surcharges will be implemented by the Texas Commission on Environmental Quality (TCEQ) in separate actions.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The rulemaking adds new definitions in §336.702 of "commercial processing," "commingling," "incidental," "party state compact waste," "waste from other sources," and "waste of international origin."

The rulemaking for §336.745 implements THSC, §401.207(k) to limit the disposal of LLRW that contains party state compact waste that has been commingled at a commercial processing facility, as provided in §336.745. The applicability subsection in §336.745(a) explains that the commingling limitations of compact party state waste with waste from other sources does not

prohibit the commingling of compact party state waste with waste from different in-Compact generators and also recognizes that the comingled nonparty waste can be subject to the terms of an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal. Section 336.745(b) limits the disposal of LLRW that contains party state compact waste that has been comingled at a commercial processing facility with waste from other sources only as authorized in §336.745. Under §336.745(c), the comingled waste from other sources must meet the thresholds and criteria established in §336.745(g). Section 336.745(d) prohibits the disposal of comingled waste unless the comingling was incidental to the processing of the waste at a commercial processing facility. In order to ensure that waste that has been commercially processed meets the requirements with respect to comingling, under §336.745(e), the licensee of the Compact Waste Disposal Facility will be required to submit a report to the executive director that identifies the generator of the waste; the processor of the waste; the processing methods; and the volume, physical form, and radioactivity of the processed waste. There must be a certification whether party state compact waste has been comingled with waste from other sources, that it has not been comingled, either intentionally or unintentionally, with waste of international origin, and that it has not been intentionally comingled with nonparty compact waste. There must also be certification that the processed waste meets the requirements of §336.229 and that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing. If party state compact waste has been comingled with waste from other sources, the report must identify waste streams as they enter and exit a specific process at a commercial processing facility, and certify that the comingling of the waste was incidental to the processing of the party state compact waste. The comingling threshold and criteria have been established by §336.745(g) by waste stream, specifically Class A LLRW for Dry Active Waste (DAW) and for Nuclear Utility Resin, and for Class B and C LLRW which is either Nuclear Utility Resin or Nuclear Utility Filter waste.

The new §336.747 implements THSC, §401.207, which prohibits the acceptance of waste of international origin.

B.) Scope required by federal regulations or state statutes:

This rulemaking is required by new THSC, §401.207(k), which is added by SB 1504.

C.) Additional staff recommendations that are not required by federal rule or state statute:

None.

Statutory authority:

THSC, §401.207, Out-of-State Waste

THSC, §401.011, Radiation Control Agency

THSC, §401.051, Adoption of Rules and Guidelines

THSC, §401.103, Rules and Guidelines for Licensing and Registration

THSC, §401.104, Licensing and Registration Rules

THSC, §401.412, Commission Licensing Authority
Effect on the:

A.) Regulated community:

This rulemaking will affect the compact waste disposal facility license holder, commercial processors of LLRW, generators of LLRW, and the Texas Low-Level Radioactive Waste Compact Commission.

B.) Public:

There is general public interest in the activities at the compact waste disposal facility, but the rulemaking affects those who dispose, process, or generate LLRW.

C.) Agency programs:

Office of Waste: Staff review of reports submitted under new §336.745 will be required to address the receipt and disposal of waste that has been processed at a commercial waste processing facility. No additional full-time employees (FTEs) are required.

Environmental Law Division: Legal support for the Office of Waste, as necessary. No additional FTEs are required.

Stakeholder meetings:

A public hearing on the rules was held on January 12, 2012. The commission received comments from Waste Control Specialist (WCS), EnergySolutions, Studsvik, Advocates for Responsible Disposal in Texas (ARDT), Entergy Services, Inc. representing Vermont Yankee, Cox, Smith, Matthews (CSM) representing the South Texas Project Nuclear Operating Company, Luminant Power, which owns and operates Comanche Peak Nuclear Power Plant, the Sustainable Energy and Economic Development (SEED) Coalition, and Robert Singleton representing himself. The commission has been working in coordination with the TLLRWDC on this rulemaking through an appointed TLLRWDC Rules Committee. Comments have been received and discussed with the TLLRWDC as part of the commission's coordination efforts.

Public comment:

The comment period closed on January 23, 2012. The commission received written comments from WCS, EnergySolutions, Studsvik, ARDT, Entergy Services, Inc. representing Vermont Yankee, CSM, the Southeast Compact Commission, the SEED Coalition, and the Texas Radiation Advisory Board.

The majority of the comments received suggested that the limitation to 5% by radioactivity of waste from other sources should either be increased to a higher percentage, by volume or mass instead of radioactivity, be dependent on the processing technique, and/or be based on pre-processing data. Some comments stated that the 5% radioactivity limit should be reduced to 1% and one comment stated that 5% by radioactivity was good. Other comments were to allow the commingling of compact party state waste and LLRW that is subject to an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal from different generators. Other comments concerned certification of processors and certification of how the waste was processed, changes in

some of the definitions, exemptions from the commingling limits for certain types of waste, the prevention of commingling of international waste with domestic waste, changes in the reporting requirements, the inclusion of a discussion concerning sealed sources, defining when a radioactive substance becomes a waste, and grandfather clauses for preexisting contracts between generators and processor.

Significant changes from proposal:

The definitions of commingling in §336.702(6) was changed from listing waste processes to "any process" based on a comment from WCS. A new §336.745(a) was added to clarify that compact party state waste from different generators can be commingled and that LLRW subject to an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal from different generators can be commingled based on comments from ARDT, TLLRWDC and CSM. Additional certification requirements by the licensee and the processor were added for processed waste to certify that no party state compact waste has been commingled, either intentionally or unintentionally, with waste of international origin based on comments from the SEED Coalition and to certify that no party state compact waste has been intentionally commingled with nonparty compact waste based on comments from the SEED Coalition. A new requirement was added for the licensee and the processor to certify that the processed waste meets the requirements of §336.229 based on comments from WCS and ARDT and that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing based on comments from the TLLRWDC and TRAB. Section 336.745 was modified to change the commingling limit from 5% by radioactivity for all waste to specific limits for different types of waste streams. Different limits of the amount of waste from other sources are established for different waste streams by volume, radioactivity, or weight. Waste from other sources may not exceed: 0.05 µCi per gram or 10% of Class A LLRW limit for Dry Active Waste, Nuclear Utility Resin, and Nuclear Utility Filter waste, and 10% by volume and radioactivity for Class B and C LLRW which is either Nuclear Utility Resin or Nuclear Utility Filters based on comments from ARDT, Entergy Services, EnergySolutions, the Southeast Compact Commission, Studsvik and CSM. For waste streams not identified in §336.745(e), the waste from other sources may not exceed 10% by volume, weight, radioactivity, or concentrations limits. The time that the report required in §336.745 is due was changed from ten days to five days in response to a comment from WCS.

Potential controversial concerns and legislative interest:

Comments demonstrated a wide divergence of opinion on the originally proposed 5% radioactivity commingling limit. Some comments wanted the limit more strict by having it be 1% by radioactivity, one agreed with the 5% limit, and other comments stated that this limit was unrealistic and wanted it changed to either a higher percentage of radioactivity, be based on volume, or be based on waste type and processing technique. The commingling limits were revised based on comments.

Will this rulemaking affect any current policies or require development of new policies?

No.

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

Commissioners
Page 5
April 27, 2012
Re: Docket No. 2011-1905-RUL

TCEQ is required by state statute to adopt rules on the incidental commingling of party state compact waste with waste from other sources.

Key points in the adoption rulemaking schedule:

***Texas Register* proposal publication date:** December 23, 2011
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Attachments

Senate Bill 1504

cc: Chief Clerk, 2 copies
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The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendment to §336.702 and adopts new §336.745 and §336.747.

Sections 336.702 and 336.745 are adopted *with changes* to the proposed text as published in the December 23, 2011, issue of the *Texas Register* (36 TexReg 8725).

Section 336.747 is adopted *without change* to the proposed text and will not be republished.

Background and Summary of the Factual Basis for the Adopted Rules

The changes 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 rulemaking establishes provisions for incidental commingling of low-level radioactive waste (LLRW) accepted for disposal at the Texas Compact LLRW disposal facility. This 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 to 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 (TLLRWDC), 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 TLLRWDC.

Section by Section Discussion

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

§336.702, Definitions

The commission adopts additional definitions to §336.702. The definition of "Commercial processing" is adopted to implement THSC, §401.207(k). The definition of processing is consistent with the definition of processing in §336.1203 and includes processing activities that occur outside the State of Texas. The commission adopts the definition of "Commingling" which was not defined in SB 1504. The commission adopts the definition of "Incidental" which was not defined in SB 1504. Because new THSC,

§401.207(k) applies to incidental commingling of party state compact waste with waste from other sources, the commission has defined what makes commingling incidental. The adopted definition excludes intentional actions where wastes from different generators are purposefully combined to batch or otherwise group waste from more than one waste generator. Intentional commingling can also be used to batch or group waste from several party state generators to reduce the probability of incidental commingling of waste from other sources at a commercial processing facility utilized by both party state and nonparty state generators. Incidental commingling is an unavoidable or otherwise unintentional consequence of processing LLRW in a commercial facility for volume reduction, waste form improvement, physical considerations, and/or to meet disposal criteria. Processing waste for these purposes are recognized to be beneficial and preferred for some waste streams. The adopted 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 during processing. The commission adopts the definition of "Party state compact waste" consistent with new THSC, §401.2005(8). The commission adopts the definition of "Waste from other sources" as LLRW that is not party state compact waste. The commission adopts the definition of "Waste of international origin" which is consistent with new THSC, §401.2005(9).

§336.745, Incidental Commingling of Waste

The commission adopts 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. In response to comments, an applicability subsection was added as §336.745(a). Section 336.745(a) clarifies that the commingling limitations do not apply to the commingling of party state compact waste from different party state generators nor to waste from nonparty state generators subject to the terms and requirements of an agreement of the TLLRWDC for the importation of LLRW into the compact for disposal. Because of the addition of a new subsection (a), the remaining subsections were re-lettered. Section 336.745(b) limits the disposal of LLRW that contains party state compact waste that has been commingled at a commercial processing facility with waste from other sources under the thresholds and criteria authorized in §336.745. Subsection (c) limits the waste from other sources to the thresholds and criteria in subsection (g). Subsection (d) 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 addresses only incidental commingling, the intentional commingling of waste from different generators is not addressed in this section. Subsection (e) requires the generator's submission of a report to the executive director to ensure that commercially processed waste comports to the commingling requirements. 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. The report must certify that party state compact waste has not been commingled with waste from other sources, except for commingling incidental to processing and that the content of waste from other sources does not exceed the thresholds and criteria described in subsection (g). The report must also certify that the party state compact waste has not been commingled, either intentionally or unintentionally, with waste of international origin, that it has not been intentionally commingled with nonparty compact waste, that the processed waste meets the requirements of §336.229, Prohibition of Dilution, and that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing. Under existing rule in §336.229, no person may reduce the concentration of radioactive constituents by dilution to meet exemption levels or to change the waste's classification or disposal requirements. 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 and certification of waste inventory from a party state compact generator at the point of waste entrance into and exit from a processing unit or piece of processing equipment where it has been incidentally commingled; certification that the radioactivity content of waste from other sources does not exceed the limits described in subsection (g) and documentation of the methodology for determining the commingled thresholds and criteria; and certification that the commingling was incidental to the processing of the waste. The licensee may not dispose of LLRW that has been commercially processed without submission of the

report required in §336.745(e). The adopted rule requires that the report must be provided a minimum of five days prior to the receipt of the waste. In response to comments, revised thresholds and criteria are established for waste from other sources that is commingled incidentally with compact state party waste. As originally proposed, the only threshold was based on 5% radioactivity. In response to comments, the thresholds and criteria have been revised and are specified for the type of waste. Because different waste streams are subjected to different processing techniques, a single limitation based only on radioactivity is not feasible. Instead, the commission adopts different limitations that are specific to the type of waste stream. Waste from other sources, after processing, may not exceed the limits established in subsection (g). Subsection (g) defines the commingling thresholds and criteria for Class A LLRW waste streams of Dry Active Waste (DAW), Compactable Trash, Nuclear Utility Resins, and Nuclear Utility Filter waste not to exceed 10% by weight of the processed waste and radioactivity not to exceed either 0.05 microcurie (μCi) of any radionuclide per gram or 10% of the concentration limit for Class A LLRW consistent with §336.362, Appendix E; for Class B and C LLRW that is either Nuclear Utility Resin or Nuclear Utility Filters not to exceed 10% by volume and 10% radioactivity; for Class B and C waste streams not identified in the rule not to exceed 10% by volume, total weight, or total radioactivity; and for Class A waste streams not identified in the rule not to exceed 10% by volume, total weight, total radioactivity, or concentration limit for Class A low-level radioactive waste consistent with §336.362, Appendix E. The criteria and thresholds for

commingling under this section are for waste streams authorized by a disposal license issued under this chapter and are binding on any criteria and thresholds that may be established by the TLLRWDC.

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

Final Draft Regulatory Impact Analysis

The commission adopts the rulemaking under 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 act. "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 adopted rules in Chapter 336 are 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 adopts these rules 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 adopted rules also add definitions and implement a statutory prohibition on the receipt and disposal of waste of international origin.

Furthermore, the adopted rules do 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 adopted rules do 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 adopted rules do not exceed the standards set by federal law. The adopted rules implement new requirements in state statutes enacted in SB 1504.

The adopted rules do 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 adopted rules do 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 adopted 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 rule 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 invited public comment regarding the draft regulatory impact analysis determination during the public comment period. One comment was given by *EnergySolutions*, stating disagreement with the TCEQ determination that the proposed rule is not a major environmental rule. *EnergySolutions* reasoning was, since the proposed rule will have a direct negative financial effect on generators in the "Compact", who will now be required to either increase disposal costs for waste sent to the Regional Compact Facility at an undetermined cost or pay significant surcharges in order to meet the new criteria proposed in the rule. *EnergySolutions* stated that the increased costs to Texas generators and increased occupational radiation exposure to process workers, due to this 5% radioactivity commingling rule, was not included in the benefit analysis developed for the rule.

Takings Impact Assessment

The commission evaluated these adopted rules and performed a preliminary assessment

of whether the adopted 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 adopted rules also add definitions and implement a statutory prohibition of the acceptance and disposal of waste of international origin.

Promulgation and enforcement of the adopted rules would be neither a statutory nor a constitutional taking of private real property because the adopted rules do not affect real property. Because the adopted 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 adopted 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 adopted rules will not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rules and determined that the 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.

The commission invited public comment regarding the consistency with the coastal management program during the public comment period. Comments were not received on the Coastal Management Program.

Public Comment

The commission held a public hearing on January 12, 2012. The comment period closed on January 23, 2012. The commission received comments from Waste Control Specialist (WCS), EnergySolutions, Studsvik, Advocates for Responsible Disposal in Texas (ARDT), Entergy Services, Inc. representing Vermont Yankee, Cox, Smith, and Matthews (CSM) representing the South Texas Project Nuclear Operating Company, Luminant Power, which owns and operates Comanche Peak Nuclear Power Plant, the Southeast Compact Commission, the Sustainable Energy and Economic Development (SEED) Coalition, Texas Radiation Advisory Board (TRAB), and Robert Singleton representing himself. The commission has been working in coordination with the TLLRWDC on this rulemaking through an appointed TLLRWDC Rules Committee. Comments have been received and discussed with the TLLRWDC as part of the commission's coordination efforts. One comment received supported the rulemaking, eight comments received were against the rulemaking, and nine, including the

TLLRWDC, suggested changes.

Response to Comments

Comments on Definitions

WCS commented that the definition of commingling in §336.702(6) be changed to clarify that this definition only applies to the commingling of party state compact waste with waste from other sources.

Rather than change the definition of commingling, the commission adopts an applicability subsection in new §336.745(a) to explain that the limitations and thresholds established in the section only limit the incidental commingling of party state compact waste with waste from other sources and do not apply to party state compact waste that is commingled with other party state compact waste or waste that is subject to an agreement for importation into the Texas Compact by the Texas Low-Level Radioactive Waste Compact Commission.

ARDT and CSM commented that waste generated from outside the Compact, that is approved by the TCEQ and the Compact Commission for importation and disposal in the Texas Compact Waste Disposal Facility should become "compact waste" and therefore, allowed to be commingled with party state compact waste without limitation,

with the criteria that the out-of-compact importer will still pay the import rate, only import the amount that was authorized by the TLLRWDC, and the waste will be examined as being compatible for disposal at the facility. ARDT and CSM commented that the definition of "party state compact waste" should consequently be removed and replaced with the following definition for the new term "compact waste", which is from THSC, §401.2005(l): "Compact waste – Low-level radioactive waste that, (A) is generated in a host state or a party state or, (B) is not generated in a host state or a party state but has been approved for importation to this state by the compact commission under Section 3.05 of the compact established under Section 403.006 Texas Health and Safety Code." ARDT and CSM commented that, based on this change, the phrase "party state" should be removed from the following rules: §§336.702(16), 336.702(27), 336.745(a), 336.745(b), 336.745(c), 336.745(d)(2), and 336.745(d)(3). CSM stated that, based on this change, §336.745(a) should be removed in entirety.

The commission does not agree with the suggestion to remove the definition of "party state compact state waste" and use "compact waste," instead. The limitations on incidental commingling of waste established in this rulemaking do not apply to waste that is approved for importation for disposal in the Texas Low-Level Radioactive Waste Disposal Compact by the TLLRWDC. In response to comments, a new §336.745(a), titled "Applicability", was added to the rule to clarify conditions of commingling

that apply to the rule and to recognize that waste may be subject to terms of an agreement with the TLLRWDC on imported waste. The commission believes that these changes are sufficient to clarify this position: thus the definition of party state compact waste does not need to be modified; the term "party state compact waste" does not need to be changed to "compact waste"; and proposed §336.745(a), now §336.745(b), does not need to be removed. The definition of "party state compact waste" is consistent with the definition in TRCA.

WCS commented that the definition of commercial processing in §336.702(5) should have the terms "storage" and "transfer" removed since storage and transfer refer to the movement of containers and does not require handling or manipulation of the radioactive material.

The commission respectfully does not agree with this comment. The definition of processing in §336.1203(9) includes storage and transfer as being part of processing. This processing definition is also consistent with the statutory definition in THSC, §401.003(16). No changes have been made in response to this comment.

WCS commented that the phrase "Any mixing, blending, down-blending, diluting, or

other" should be removed from the definition of commingling in §336.702(6) because listing the processes in §336.702(6) is redundant since the processes are listed in the commercial processing definition at §336.702(5). WCS stated that including dilution in the commingling definition is confusing since dilution is prohibited by §336.229. ARDT commented that the words "down-blending" and "diluting" should either be removed from the commingling definition or the definition should be changed to explain why down-blending and diluting are included in the definition.

The commission agrees that the attempt to provide descriptors in the proposed definition of commingling added confusion. In response to comment, §336.702(6) has been modified by replacing "mixing, blending, down-blending, diluting, or other processing" with "process."

The Southeast Compact Commission commented that the definition of "commingling" in §336.702(6) should be modified as "any unintentional mixing, blending or diluting that combines radioactive substances from two or more generators as a result of commercial processing of radioactive substances." The TLLRWDC commented that "incidental commingling" and "intentional commingling" should be further discussed and defined. This discussion should clearly identify the difference between the intentional commingling of party state

LLRW versus the intentional commingling of non-party and party wastes.

Commingling can be intentional or unintentional. This rulemaking addresses *incidental* commingling of party state compact waste with waste from other sources, as required by SB 1504. For purposes of this rulemaking, incidental means unavoidable or otherwise unintentional actions that prevent party state compact waste from being kept separate from waste from other sources because of undue risk to occupational or public health and safety and the environment. This rulemaking does not address intentional commingling of waste, which could be accepted for disposal into the compact disposal facility if all of the waste were generated in a party state or approved for importation for disposal by the TLLRWDC. In response to comment, a discussion has been added in Section By Section of the preamble on variations of intentional commingling of waste. Additionally, the definition of incidental was modified to clarify that commingling was the result of unavoidable or otherwise unintentional actions.

The Southeast Compact Commission states that the proposed definition of "incidental" in §336.702(16) is unclear and misleading and suggests using the dictionary definition for incidental: "accompanying but not a major part of

something" or "liable to happen as a consequence."

The commission respectfully does not agree with this comment. The suggested definitions proffered by the Southeast Compact Commission are not sufficient to determine readily whether or not commingling is incidental; they are too ambiguous. The definition of "Liable to happen as a consequence" does not differentiate between intentional or unintentional which is an important aspect of processing decisions and of SB 1504. The association in the definition to undue risk to occupational or public health and the environment should be familiar to licensees who practice "ALARA" (as low as reasonably achievable) principles encouraged by the NRC and Agreement States for safe radiation protection programs. No changes have been made in response to this comment.

ARDT and CSM commented that the commission should clarify why "containerized class A waste" (§336.702(7)) is the only waste type defined in the rules.

The definition of "Containerized Class A Waste" was already present in Subchapter H before this rulemaking for other licensing considerations and was not proposed for change as part of this rulemaking. It is a category of

Class A that is subject to special requirements under a disposal license issued under Subchapter H of Chapter 336. No changes have been made in response to this comment.

TRAB commented that the regulations should include a definition of a waste generator.

The radioactive substances rules define waste generator in §336.1303(7). A generator is defined as a "person, partnership, association, corporation, or any other entity whatsoever that, as part of its activities, produces low-level radioactive waste and is subject to the Compact." This definition has not been proposed to change. No changes have been made in response to this comment.

Comments on Limitations of Incidental Commingling

WCS, CSM, Studsvik, and ARDT commented that the rules should be clear that commingling of party state compact waste with other party state compact waste from several generators be allowed. TLLRWDC recommended that party state waste generators attempt to intentionally commingle, or otherwise batch, their LLRW to reduce the probability of incidental commingling at the processor site. TLLRWDC also recommended that the preamble include discussion of the differences between intentional commingling of party state waste sources and the intentional commingling

of party and nonparty waste streams. WCS stated that the following sentence – "In general, intentional commingling of LLRW from more than one generator is prohibited in order to attribute each waste shipment to a specific generator." - in the third paragraph of the section "Public Benefits and Costs" be removed or changed to clarify that this rule does not limit the commingling of waste from two-party state compact waste generators. ARDT commented that §336.745(d)(2) should be changed to allow the acceptance for disposal of waste from different party state compact waste generators that were commingled at a commercial processing facility and also to provide a method for commingled compact waste to be documented and attributed to the actual generator for tracking and pricing purposes.

In response to comments, the rule has been revised to add a statement on applicability (§336.745(a)) to clarify that commingling of party state compact waste with other party state compact waste from several generators is allowed. The sentence in "Public Benefits and Costs" cannot be altered since this section does not appear in the adoption preamble. The commission has added discussion in the Section By Section of the preamble on variations of intentional commingling of waste. The commission believes the new applicability rule in §336.745(a) is sufficient, and that the definition in §336.702(6) and that §336.745(e)(2), do not need to be changed to clarify this position. The thresholds and criteria established in

§336.745 do not apply to party state compact waste that is commingled with other party state compact waste or waste that is subject to an importation agreement for disposal in Texas by the TLLRWDC.

WCS commented that it supports the incidental commingling limit of 5% by radioactivity since a higher limit could allow nonparty state waste to be disposed in the Compact Waste Facility at compact rates and without the additional 20% surcharge that is applicable to all nonparty state waste.

The commission has modified the 5% by radioactivity limitation, based on the comments that such a limit is not technically practical for the processing of waste from party state generators and falls short of providing thresholds and criteria by waste stream. The incidental commingling thresholds and criteria are still designed to minimize as far as practical the amount of nonparty state waste being disposed in the Compact Waste Disposal Facility (without approval for importation for disposal by the TLLRWDC), while allowing for the benefits of processing to be realized.

ARDT, Entergy Services, EnergySolutions, the Southeast Compact Commission, and CSM commented that the 5% by radioactivity limit is arbitrary, unreasonable, technically impractical, would result in the disposal of as-generated volumes instead of

as-processed volumes, which would consequently decrease the available volume in the Compact Waste Disposal Facility, limit treatment options, would result in higher costs, and would increase the radiation exposure and other safety issues to workers. Studsvik, ARDT, Entergy Services, *EnergySolutions*, and CSM commented that the 5% by radioactivity limit should be either higher or based on volume or mass instead of radioactivity. TLLRWDCC recommended that the limits be modified and based on waste streams and radionuclides of concern rather than a percentage of total radioactivity. TLLRWDCC also recommended that some waste classification or waste streams, however, should have limits based on radioactivity (i.e., Class C LLRW such as nuclear power plant resins).

Studsvik commented that using volume as the unit of measure creates more certainty, improves compliance and recordkeeping accuracy, reduces operational burdens, and minimizes worker dose. Studsvik commented that through its operational knowledge, it is confident that it can meet a 5% by volume commingling limitation. Studsvik stated that that the rule could recognize the challenges of radioactivity measurement under certain conditions and allow for alternatives to that requirement while remaining faithful to the intent of SB 1504.

EnergySolutions commented that qualitative controls (i.e., simple segregation for sequencing processing by point-of-origin) are adequate and that qualitative evaluations

of potential cross-contamination should be considered for full inventories to be campaigned, not individual packages. *EnergySolutions* also commented that §336.745(e)(3)(B) should be removed.

The Southeast Compact Commission commented that the 5% limit is impossible to demonstrate.

ARDT commented that the rule goes "too far" and would treat waste generated in Texas or Vermont as if it is imported waste if it experiences commingling of more than 5% of the total radioactivity with out-of-Compact waste at commercial processing facilities.

ARDT suggested language that "the processor shall certify to TCEQ that the waste has not been downblended or blended, mixed or commingled with LLRW that was not generated in the party states except for waste incidental to the use of commercial processing facilities."

The Southeast Compact Commission commented that TCEQ should consider an alternative to the 5% radioactivity limitation as an approach for the limitation of incidental cross-contamination at commercial processing facilities.

EnergySolutions, *Entergy Services*, CSM, and ARDT commented that the reasonable fraction of commingling is dependent on the processing technique used and that the rule

should be based on the type of processing or treatment that the waste has undergone and the volume, mass, form, and concentration of the waste involved.

The commission respectfully disagrees with the complete removal of radioactivity as a unit of measure concerning commingling limits although understands the concerns with a 5% limit. The commission does agree that volumetric limits should also be utilized for measuring commingling. The radioactive disposal license for the Compact Waste Disposal Facility imposes volumetric and radioactivity limits for waste that may be accepted for disposal. Therefore, both the volume and the radioactivity added by waste to the Compact Waste Disposal Facility due to incidental commingling must be restricted due to their potential impact to license limitations. The commission has modified the 5% by radioactivity rule based on comments that such a limit is not technically feasible. Waste processing can be divided into specific waste stream categories according to waste type and waste processing. DAW or compactable trash is low radioactivity (Class A LLRW) and is typically processed through compaction and incineration, and possibly supercompaction of the resulting radioactive ash. Resins typically have high radioactivity values (Class B/C LLRW) and are treated using other techniques, such as the THOR[®] process by the Studsvik facility in Erwin, Tennessee. The radioactivity commingling limits

have been modified so that there are separate limits for Class A and Class B/C LLRW. Class B/C LLRW has a 10% total radioactivity commingling limit and Class A has two limits: commingling may not exceed 0.05 microcurie (1.85 kilobecquerels) per gram or 10% of the concentration limit for Class A LLRW consistent with radioactivity levels in §336.362. Class A LLRW limits for incidental commingling are structured so that waste classification does not change and extends the use of existing concentration limits in TCEQ rules for other LLRW streams. The different approach for Class A LLRW is in recognition of the different physical properties and radioactivity levels of Class A LLRW up to the Class A limit and its subsequent processing. The 0.05 microcurie per gram limit was based on the exemption limits for specific radionuclides in §336.225(a). Class B/C LLRW radioactivity is necessarily limited for incidental commingling due to the potential impact of this higher radioactivity to the license limitations. The commission respectfully disagrees with the comments that the rule should have exclusively qualitative limits instead of quantitative limits. The commission has modified the rule so that the commingling limits are still quantitative, but set technically achievable commingling limits per waste stream in recognition of the waste process that will limit the amount of waste from other sources being commingled with party state compact waste. Waste streams identified in the rule are DAW, compactable trash,

nuclear utility resins, and nuclear utility filters for Class A LLRW and nuclear utility resins and filters for Class B/C LLRW. If a particular waste stream is not identified in the rule, adopted §336.745(g)(6), limits the waste from other sources in that waste to a percentage by volume, weight, total radioactivity, and concentration limits.

The SEED Coalition and Robert Singleton commented that the 5% limit should be reduced to 1% of radioactivity since it is more protective, that a high commingling radioactivity limit may result in commingling becoming a standard business practice instead of incidental, and that the health and safety of Texas should be considered above processing and disposal costs. The SEED Coalition also stated that an additional cap by volume should be incorporated into the rule.

The commission respectfully disagrees with this restrictive limitation. A limit of 5% or 1% by radioactivity has been shown to be technically unachievable without a significant increase in cost and radiation exposure to workers at processing facilities. If thresholds and criteria are restrictive, beneficial processing to reduce waste volume or improve waste form may not be performed resulting in a decrease in the available disposal volume at the Compact Waste Disposal Facility. The commission believes that the revised commingling limits by waste stream and the additional required

certifications will minimize, to the extent achievable, the amount of waste from other sources being commingled with party state compact waste.

ARDT commented that the commingling limit should be applied to the raw, pre-processed waste as it is placed as feed stock to waste treatment equipment and that any further commingling would represent only machine residues that can be expected to be incidental quantities in both volume and radioactivity content.

The commission agrees that the commingling limit should apply to the raw, pre-processed waste as it is placed as feed stock to waste treatment equipment. Radionuclide inventories should be certified before the waste is processed. Pre-sorting to this waste stream would reduce the waste entering the processing unit or piece of processing equipment where commingling is unavoidable. In response to comment, a new requirement and certification has been added to the reporting that identifies the waste inventory at two points - upon entering as well as exiting a processing unit or piece of processing equipment where incidental commingling may occur.

ARDT stated that the rule must have reasoned justification in accordance with Texas Government Code, §2001.033 and that the commission should provide the legal and technical basis for limiting commingling at 5% of total radioactivity in the rulemaking

preamble.

The commission believes that it has provided the reasoned justification for this rulemaking. The originally proposed 5% of total radioactivity commingling limit has been modified in response to comments, this comment is addressed by that change in rule language. The commission has explained the rationale for the various thresholds and criteria established in §336.745(g).

WCS commented that the report submittal time in §336.745(d)(1), now re-lettered as subsection (e)(1), should be changed from ten days prior to receipt to five days prior to receipt to coincide with WCS's waste acceptance process and shipment request process which has a five-day advance.

Approved Waste Acceptance Criteria in the license for the Compact Waste Disposal Facility, the TCEQ Waste Shipment Verification Form, and WCS procedures require that information on waste shipments be submitted to WCS and the TCEQ at least five days prior to planned receipt of waste. The commission agrees with the comment and to maintain consistency §336.745(e)(1) will be changed to reflect at least a five-day advance submittal time instead of ten days.

WCS and EnergySolutions commented that in proposed §336.745(d)(2), now re-lettered as subsection (e)(2), the word "waste" should be added after the phrase "party state compact" and the phrase "that has" is repeated and should be corrected.

The proposed rules published in the *Texas Register* do not have these errors. The commentators may have been reading an earlier draft version of the preamble and not the version proposed in the *Texas Register*. No changes have been made in response to this comment.

WCS commented that §336.745(d)(2), now re-lettered as subsection (e)(2), should be rewritten to the following: "If commercially processed waste from other sources has not been commingled with party state compact waste the processor and licensee shall only be required to certify that waste from other sources has not been commingled with party state compact waste."

The commission respectfully disagrees with this suggested rewriting of §336.745(e)(2). If a processor has only processed party state compact waste, the rules as adopted are sufficient to allow the processor to certify that there would be no waste from other sources commingled with the party state compact waste. The commission has revised the rule to require a

certification that there is no commingling of waste of international origin.

No changes have been made in response to this comment.

EnergySolutions commented that §336.745 is specific to waste sent for processing and then returned for disposal at the compact facility, but should be changed to include waste exported for processing and subsequent disposal at a non-compact facility.

The commission respectfully disagrees with this comment. This rulemaking is based on SB 1504 which is concerned only with the disposal of waste in the Compact Waste Disposal Facility. The inclusion of waste exported from the TLLRWDCD for disposal in a non-compact facility is outside the scope of this rulemaking and the authority of the commission. Export of party state compact waste is under the authority of the TLLRWDCD and appropriate terms may be added by the TLLRWDCD with approval to export for processing. No changes have been made in response to this comment.

ARDT commented that §336.745 should include provisions for disposal of waste that has been processed at a "certified" waste processor. ARDT stated that the processes and procedures utilized at the facilities of a "certified" waste processor could be initially and subsequently periodically audited by the TCEQ, or an independent authority, to verify

that waste treated at their facility complies with TCEQ rules for waste form, stability, packaging and commingling. ARDT also commented that waste shipments from a certified waste processing should not require advance notification of waste shipments by the licensee to TCEQ.

Certification of waste processors outside of Texas is not within the jurisdiction of the commission. The commission has authority over what waste will be placed in the Compact Waste Disposal Facility and each waste shipment must be approved and accepted by the commission's resident inspectors. The waste manifest will be examined and if the waste does not meet the license and the approved waste acceptance criteria, it will be rejected. Waste processed at a commercial processing facility is subject to the reporting requirements of §336.745(e) and, if it includes incidentally commingled waste from other sources, it must meet the criteria and thresholds of subsection (g). No changes have been made in response to this comment.

The SEED Coalition commented that the proposed rule provides no oversight to ensure that processors comply with the TCEQ policy and no penalties for violating it; therefore, the rule should include significant penalties and establish an enforcement mechanism for processors who inaccurately assess or falsely report the amount of commingled

waste.

The commission does not have jurisdiction over waste processors that are outside of Texas and thus, is not able to provide oversight or enforce penalties. The commission has authority to accept or reject any waste shipment for disposal in the Compact Waste Disposal Facility. Each waste shipment must be approved by the commission's resident inspectors who will examine the waste manifest. If the waste disposal licensee is receiving waste processed at a commercial processing facility, there are reporting requirements under §336.745(e) and, if the commercially processed waste includes incidentally commingled waste from other sources, the waste from other sources must meet the criteria and thresholds of §336.745(g). Deliberate falsification of information on the waste manifest or other reports submitted to the agency may be a criminal violation and may be subject to enforcement. No responses have been made in response to this comment.

ARDT commented that TCEQ should consider adding language that would exempt certain types of waste, such as DAW, from the commingling rule that fall below a certain volume, mass or radioactivity threshold.

The commingling limitations have been modified and are specific to the waste type.

WCS commented that party state compact waste may be subject to importation and out of compact disposal rates due to insufficient data to certify that commingling above the 5% radioactivity limit has not occurred. WCS stated that the certifications required to comply and properly document that the waste meets the criteria of §336.745(d)(3), now re-lettered as subsection (e)(3), are heavily dependent on the information provided by the generator and/or commercial processor and requires WCS to take on additional liability. Therefore, WCS will require its own certifications and supporting documentation by the original generator and it expects resistance from the processors in providing this information about their customers to WCS. WCS stated that the following verbiage should be added to the rule: "If incidental commingling of waste during commercial processing results in a contribution of more than 5% of the total radioactivity from waste from other sources, the generator and/or waste processor is unable to definitively determine the contribution from waste from other sources, or the commingling was not incidental, then the generator must follow the process for importation approval of the waste and that waste shall be subject to out of compact disposal rates."

If waste from other sources is commingled with compact state party waste

and cannot meet the reporting or threshold requirements of §336.745, the generator of the waste from other sources, or other persons as determined by the TLLRWDC, may seek an agreement from the TLLRWDC for the importation of the waste into Texas for disposal. No changes have been made in response to this comment.

ARDT commented that generators should not be forced to sign documents for waste enroute to the compact facility after processing, but that the processor should complete and sign these documents since the processors understand their abilities and techniques.

This rulemaking does not require generators to sign documents for waste enroute to the Compact Waste Disposal Facility after processing. The licensee in §336.745(e), who is required to file the report described in this rule, is the operator of the Compact Waste Disposal Facility who has a commercial radioactive waste disposal license and not the generator. No changes have been made in response to this comment.

ARDT stated that the processor should have the responsibility to notify the generator of the post processing results for their waste, such as volume and radioactivity prior to being shipped to obtain concurrence from the generator.

It is not within the jurisdiction of the commission to require a processor outside of Texas to notify the generator. In order for commercially processed waste to be acceptable for disposal at the compact waste disposal facility, generators and commercial processors should have understanding of these rules to assure that the reporting requirements and limitations can be met. It is the generator's responsibility to ensure that rules can be met prior to making a decision to process their waste. No changes have been made in response to this comment.

WCS commented that §336.745(d)(3)(B) and (C), now re-lettered as subsection (e)(3)(B) and (C), do not provide any guidance of waste streams that do not meet, or cannot be proven to meet, the incidental commingling criteria, and the language should be changed to more clearly show the intent of these two sections.

The modification of the commingling limitation based on waste streams found in the adopted §336.745(g) should supply the requested guidance and clarification on the thresholds and criteria to limit specific waste streams. If waste from other sources is commingled with compact state party waste and cannot meet the reporting or threshold requirements of §336.745, the generator of the waste from other sources, or other persons as determined

by the TLLRWDC, may seek an agreement from the TLLRWDC for the importation of the waste into Texas for disposal.

The SEED Coalition and Robert Singleton commented that a provision should be included in the rule that prohibits waste to be disposed of in Texas, or returned to the state, if it has been processed by any processor that accepts international waste or until the processor can certify that no international waste could get commingled with the compact waste. *EnergySolutions* commented that it would certify wastes processed at their facility from the TLLRWDC as having no international component.

The commission respectfully disagrees with the comments that waste processed at a facility that had processed any international waste should be automatically rejected from being disposed in the Compact Waste Disposal Facility. Processing international waste is uncommon in the United States and waste processors are able to certify that no international waste has been commingled with domestic waste. To clarify the prohibition in this rule, a provision has been added requiring a certification that party state compact waste has not been commingled with waste of international origin.

EnergySolutions commented that requiring waste generators in the Texas Compact to obtain an export permit before making arrangements to process LLRW at facilities

located outside of the Texas Compact could impair the rights of parties to existing contracts by restricting future exports of LLRW to the processing facilities and would act to penalize *EnergySolutions* and its processing facilities. *EnergySolutions* stated that the following sentence be added to §336.745: "The existence of an agreement governing the export for processing of waste at a facility outside of the Texas Compact that was entered into prior to the adoption of these regulations governing 'Exportation of Waste for the purposes of processing,' in which case this factor shall be dispositive so as to authorize the Export Permit."

Export permits for party state compact waste to be processed outside of Texas or Vermont is the jurisdiction of the TLLRWDC and thus, the commission is not able to address this comment in this rulemaking. No changes have been made in response to this comment.

The TRAB commented that the preamble should include a discussion of sealed sources that might be subject to processing. The TLLRWDC commented that sealed source should be defined and that sealed sources should not be processed to destroy or intentionally degrade the physical attributes of the source and therefore, should be addressed as a waste stream subject to incidental commingling.

The definition for sealed sources is found in radioactive substance rules at

§336.1(122) as follows: "Sealed source--Radioactive material that is permanently bonded or fixed in a capsule or matrix designed to prevent release and dispersal of the radioactive material under the most severe conditions that are likely to be encountered in normal use and handling." The commission intends that sealed sources would not be processed in a manner that would have the possibility of the sealed source being incidentally commingled with other waste. The commission has added a certification requirement to the rule to address this comment.

The TRAB commented that the regulations should state when a radioactive substance becomes a waste.

Part of the definition of waste in §336.2(77)(A)(i) is that waste is discarded or unwanted. This is a determination made by the licensed possessor of a radioactive substance at the time that a substance is no longer useful or when a substance can no longer be put to practical beneficial use. The commission does not have authority to declare timing of when a radioactive substance becomes a waste, if the substance is discarded or unwanted in a state other than Texas, or even by a Texas radioactive material licensee if licensed by the Department of State Health Services. If the substance is declared and/or manifested as a waste, then the commission would

consider it a waste. No changes have been made in response to this comment.

The TRAB commented that this rulemaking should include clarification on how the 5% by radioactivity incidental commingling rule would be applied to the introduction of a new radionuclide to a waste, compared to how the rule applies to a radionuclide already in the waste that is increased in radioactivity due to incidental commingling.

The commission appreciates that distinction made by the TRAB. The 5% by radioactivity incidental commingling rule that was proposed was for total radioactivity and was not determined per radionuclide. The proposed commingling limits have been modified and now include limits based on total radioactivity and the concentration values of specified radionuclides.

EnergySolutions commented that it disagrees with the TCEQ determination that this proposed rule is not a "major environmental rule" since the proposed rule will have a direct negative financial effect on generators in the compact, who will now be required to either increase disposal costs for waste sent to the Regional Compact Facility at an undetermined cost or pay significant surcharges in order to meet the new criteria proposed in the rule. *EnergySolutions* stated that the increased costs to Texas generators and increase occupational radiation exposure to process workers due to this

5% radioactivity commingling rule was not included in the benefit analysis developed for the rule.

The adopted rules have been revised from proposal to establish different limitations specific to waste stream type for party state compact waste commingled with waste from other sources. As explained in the Final Regulatory Impact Analysis, the commission determined that this rulemaking is not a major environmental rule. If waste from other sources, that is commingled with party state compact waste, cannot meet the limitations established in these rules, the generator of the waste from other sources, or other persons as determined by the TLLRWDC, can seek an agreement from the TLLRWDC to allow importation of the waste to Texas for disposal at the Compact Waste Disposal Facility.

**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 adopted 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 adopted 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 adopted 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 **process** ~~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--**Unavoidable or otherwise** unintentional actions that, with respect to commingling of waste, prevents 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.

(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) Applicability. this section does not limit party state compact waste that is commingled with other party state compact waste during processing nor low-level radioactive waste that is subject to an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission for the importation of low-level radioactive waste into the compact for disposal. The terms of an agreement of the Texas Low-Level Radioactive Waste Disposal Compact Commission may provide requirements for any processed waste. Acceptance and disposal of waste for all sources by the licensee is limited to the waste specifically authorized by the license issued under this chapter.

(b) ~~(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.

(c) ~~(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 **that does not** ~~if the radioactivity of the waste from other sources~~ exceed **the thresholds and criteria established in subsection (g) of this section** ~~5% of the total activity of the commingled waste.~~

(d) ~~(e)~~ 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 **and processing has not altered the waste class in accordance with §336.229 of this title (relating to Prohibition of Dilution).**

(e) ~~(f)~~ **No less than five** ~~10~~ days prior to the receipt **by the licensee** ~~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, including commingling with waste of international origin except for commingling incidental to processing, and that the radioactivity content of waste from other sources does not exceed 5% of the total activity; 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 and certify the waste inventory from a party state compact generator at the point of waste entrance into and exit from a processing unit or piece of processing equipment where it has been commingled with 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 the thresholds and criteria established in subsection (g) of this section 5% of the total activity of the commingled waste and provide documentation of

how compliance with the thresholds and criteria in subsection (g) of this section the radioactivity content was were 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.

(D) certify that no waste of international origin was either intentionally or unintentionally commingled and that no nonparty compact waste was intentionally commingled with party state compact waste during processing.

(E) certify that processed waste meets the requirements of §336.229 of this title.

(F) certify that sealed sources have not been destroyed or damaged to alter the physical form of the sealed source as part of processing.

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

(g) Waste streams allowed for acceptance for disposal by the licensee are specifically authorized by the disposal license issued under this chapter. Waste from other sources that is incidentally commingled with compact party state waste may not exceed the thresholds and criteria established in the subsection.

(1) Dry Active Waste or Compactable Trash. Authorized common trash, Class A low-level radioactive waste—after processing, waste from other sources may not exceed 10% of the total weight of the processed waste. The radioactivity of waste from other sources may not exceed:

(A) 0.05 microcurie (1.85 kilobecquerels) for any radionuclide per gram; or

(B) 10% of concentration limit for Class A low-level radioactive waste consistent with §336.362, of this title (relating to Appendix E. Classification and Characteristics of Low-Level Radioactive Waste).

(2) Nuclear Utility Resins. Authorized Decontamination, Demineralization, or Secondary System Resins, Class A low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% of the total weight of the processed waste. The radioactivity of waste from other sources may not exceed:

(A) 0.05 microcurie (1.85 kilobecquerels) for any radionuclide per gram; or

(B) 10% of concentration limit for Class A low-level radioactive waste consistent with §336.362, of this title.

(3) Nuclear Utility Resins. Authorized Decontamination, Demineralization, Clean-up, or Secondary System Resins, Class B or C low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% of the total volume and radioactivity of the processed waste.

(4) Nuclear Utility Filters. Authorized filters and associated waste, Class A low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% by total weight of the processed waste. The radioactivity of waste from other sources may not exceed:

(A) 0.05 microcurie (1.85 kilobecquerels) for any radionuclide per gram; or

(B) 10% of concentration limit for Class A low-level radioactive waste consistent with §336.362, of this title.

(5) Nuclear Utility Filters. Authorized filters and associated waste, Class B or C low-level radioactive waste threshold—after processing, waste from other sources may not exceed 10% by total volume and radioactivity of the processed waste.

(6) For waste streams not identified in paragraphs (1) - (5) of this subsection. If other waste streams are processed with incidental commingling of waste from other sources, these waste streams must be specifically identified and fully described in the report submitted under subsection (e) of this section. After processing, the waste from other sources may not exceed 10% by total volume, total weight, total radioactivity, and if classified as Class A low-level radioactivity waste, may not exceed 10% of the concentration limit for Class A low-level radioactive waste consistent with §336.362 of this title.

(7) For all waste streams. If new radionuclides are introduced through incidental commingling at a commercial processing facility, these must be specifically identified and may not result in a change in waste class or increased health

and safety risks for handling and disposal of the processed waste.

§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.

Texas Commission on Environmental Quality



ORDER ADOPTING NEW AND AMENDED RULES

Docket No. 2011-1905-RUL

On May 16, 2012, the Texas Commission on Environmental Quality (Commission) adopted new and amended rules in 30 TAC Chapter 336, concerning Radioactive Substance Rules. The proposed rules were published for comment in the December 23, 2011, issue of the *Texas Register* (36 TexReg 8725).

IT IS THEREFORE ORDERED BY THE COMMISSION that the new and amended rules are hereby adopted. The Commission further authorizes staff to make any non-substantive revisions to the rules necessary to comply with *Texas Register* requirements. The adopted rules and the preamble to the adopted rules are incorporated by reference in this Order as if set forth at length verbatim in this Order.

This Order constitutes the Order of the Commission required by the Administrative Procedure Act, Government Code, §2001.033.

If any portion of this Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

Issued date:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Bryan W. Shaw, Ph.D., Chairman

proceedings. Property values will not be decreased, because the proposed rulemaking will not limit the use of real property. Thus, the proposed rule will not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the proposed rule and found that it is neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will it affect any action or authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the proposed rule is not subject to the Texas Coastal Management Program.

Written comments on the consistency of this rulemaking with the Coastal Management Program 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 January 24, 2012, at 10:00 a.m. in Room 201S, Building E at the commission's central office located at 12100 Park 35 Circle, Austin, Texas. 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 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 Patricia Duron, 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 2011-035-080-AD. The comment period closes January 30, 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 Vic McWherter, TCEQ Office of Public Interest Counsel, (512) 239-6363.

Statutory Authority

The rule is proposed under Texas Water Code (TWC), §5.013, concerning General Jurisdiction of the commission, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.102, concerning the commission's General Powers, including calling and holding hearings and issuing orders; TWC, §5.103, concerning Rules, which requires the commission to adopt rules when amending any statement of general applicability that describes the procedure or practice requirements of an agency; TWC, §5.105, concerning General Policy, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; and TWC, §5.276, which requires the commission by rule to establish factors the public interest counsel must consider before deciding to represent the public interest as a party to a commission proceeding.

The proposed rule implements TWC, §5.276.

§80.110. Public Interest Factors.

(a) In order to determine the nature and extent of the public interest, the public interest counsel must consider the following factors before deciding to represent the public interest as a party to a commission proceeding on a proposed agency action:

(1) the extent to which the action may impact human health;

(2) the extent to which the action may impact environmental quality;

(3) the extent to which the action may impact the use and enjoyment of property;

(4) the extent to which the action may impact the general populace as a whole, rather than impact an individual private interest;

(5) the extent and significance of interest expressed in public comment received by the commission regarding the action;

(6) the extent to which the action promotes economic growth and the interests of citizens in the vicinity most likely to be affected by the action;

(7) the extent to which the action promotes the conservation or judicious use of the state's natural resources; and

(8) the extent to which the action serves commission policies regarding regionalization or other relevant considerations regarding the need for facilities or services to be authorized by the action.

(b) In prioritizing the public interest counsel's workload, the public interest counsel must consider the following factors:

(1) the number and complexity of the issues to be considered in any contested case hearing on the action;

(2) the extent to which there is a known disparity in the financial, legal, and technical resources of the potential parties to the action, including consideration of whether the parties are represented by counsel;

(3) the extent to which the public interest counsel's participation will further the development of the evidentiary record on relevant environmental or consumer-related issues to be considered by the commission; and

(4) staffing and other resource limitations of the office of public interest counsel.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on December 9, 2011.

TRD-201105428

Robert Martinez

Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: January 22, 2012

For further information, please call: (512) 239-6087

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CHAPTER 336. RADIOACTIVE SUBSTANCE RULES

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

30 TAC §§336.702, 336.745, 336.747

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 anti-

pated 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

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.

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.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on December 9, 2011.

TRD-201105423

Robert Martinez

Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: January 22, 2012

For further information, please call: (512) 239-2141

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TITLE 31. NATURAL RESOURCES AND CONSERVATION

PART 2. TEXAS PARKS AND WILDLIFE DEPARTMENT

CHAPTER 51. EXECUTIVE

SUBCHAPTER P. OFFICIAL CORPORATE PARTNERS

31 TAC §§51.700 - 51.704

The Texas Parks and Wildlife Department proposes new §§51.700 - 51.704, concerning Official Corporate Partners. House Bill 1300 (HB 1300), enacted by the 82nd Texas Legislature, amended Parks and Wildlife Code, Chapter 11, by adding Subchapter J-1 to address the use of private contributions, partnerships, licensing and commercial advertising to provide additional funding for department programs, projects, and sites. Parks and Wildlife Code, §11.225, as added by HB 1300 requires the Texas Parks and Wildlife Commission (commission) to adopt rules to implement the provisions of Subchapter J-1, including rules that establish guidelines or best practices for official corporate partners.

Proposed new §51.700, concerning Definitions, would set forth the meanings of words and phrases used in the proposed new rules, and is necessary to prevent misinterpretations and misunderstandings with respect to terminology.

Proposed new §51.700(a)(1) would define the word "department" to mean the Texas Parks and Wildlife Department.

Proposed new §51.700(a)(2) would define "department brands" as "the department's trademarks, logos, name, seal, and other intellectual property." Parks and Wildlife Code, §13.0155, as added by HB 1300, authorizes the department to contract with "any entity the department considers appropriate to use the Parks and Wildlife Department brand in exchange for licensing fees paid by the entity to the department." The proposed new rules address the use and licensing of the department brands. Therefore, a definition of "department brands" is needed for clarity.

Proposed new §51.700(a)(3) would define "department site (or site)" as "a wildlife management area, fish hatchery, state park, state natural area, or state historic site under the jurisdiction of the department, or other property or facility owned or operated by the department." HB 1300 authorizes the department to work with for-profit entities to raise funds for state site operations and management, and defines "state site" as "a state park, natural area, wildlife management area, fish hatchery or historic site under jurisdiction of the department." Parks and Wildlife Code, §13.001 requires the commission to establish a classification system for department sites. To account for possible changes in classification of department sites, the proposed new definition

AN ACT

relating to the disposal or storage of waste at, or adjacent to, the Texas Low-Level Radioactive Waste Disposal Compact waste disposal facility.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 401.2005, Health and Safety Code, is amended by amending Subdivision (1) and adding Subdivisions (1-a), (1-b), (6-a), (8), and (9) to read as follows:

(1) "Compact" means the Texas Low-Level Radioactive Waste Disposal Compact established under Section 403.006.

(1-a) "Compact waste" means low-level radioactive waste that:

(A) is originally generated onsite in a host state or a party state; or

(B) is not generated in a host state or a party state but has been approved for importation to this state by the compact commission under Section 3.05 of the compact [~~established under Section 403.006~~].

(1-b) "Curie capacity" means the amount of the radioactivity of the waste that may be accepted by the compact waste disposal facility as determined by the commission in the compact waste disposal facility license.

(6-a) "Nonparty compact waste" means low-level radioactive waste imported from a state other than a party state as authorized under Section 3.05(6) of the compact.

(8) "Party state compact waste" means low-level radioactive waste generated in a party state.

(9) "Waste of international origin" means low-level radioactive waste that originates outside of the United States or a territory of the United States, including waste subsequently stored or processed in the United States.

SECTION 2. Section 401.207, Health and Safety Code, is amended to read as follows:

Sec. 401.207. OUT-OF-STATE WASTE; NONPARTY COMPACT WASTE.

(a) The compact waste disposal facility license holder may not accept low-level radioactive waste generated in another state for disposal under a license issued by the commission unless the waste is:

(1) accepted under a compact to which the state is a contracting party;

(2) federal facility waste that the license holder is licensed to dispose of under Section 401.216; or

(3) generated from manufactured sources or devices originating in this state.

(b) The compact waste disposal facility license holder may accept for disposal at the compact waste disposal facility approved nonparty compact waste that is classified as Class A, Class B, or Class C low-level radioactive waste in accordance with the compact

waste disposal facility license to the extent the acceptance does not diminish the disposal volume or curie capacity available to party states. The license holder may not accept any nonparty compact waste for disposal at the facility until the license has been modified by the commission to specifically authorize the disposal of nonparty compact waste.

(c) The compact waste disposal facility license holder may not accept waste of international origin for disposal at the facility.

(d) The compact waste disposal facility license holder may not accept for disposal at the compact waste disposal facility nonparty compact waste that does not meet the waste characteristics and waste forms for disposal applicable to compact waste as set forth by the commission in the compact waste disposal facility license. Before the license holder may accept nonparty compact waste for disposal, the commission must certify through a written evaluation that the waste is authorized for disposal under the license. If the disposal is not authorized under the license, the commission must inform the license holder of the license amendments necessary to authorize the disposal.

(e) The compact waste disposal facility license holder may not accept more than 50,000 total cubic feet of nonparty compact waste annually. The compact waste disposal facility license holder may not accept more than 120,000 curies of nonparty compact waste annually, except that in the first year the license holder may accept 220,000 curies. The legislature by general law may

establish revised limits after considering the results of the study under Section 401.208.

(e-1) The commission's executive director, on completion of the study under Section 401.208, may prohibit the license holder from accepting any additional nonparty compact waste if the commission determines from the study that the capacity of the facility will be limited, regardless of whether the limit under Subsection (f) has been reached.

(f) Of the total initial licensed capacity of the compact waste disposal facility:

(1) not more than 30 percent of the volume and curie capacity shall be for nonparty compact waste; and

(2) of the remaining capacity, not less than 80 percent of the volume and curie capacity shall be for compact waste generated in the host state and 20 percent of the volume and curie capacity shall be for compact waste generated in Vermont.

(g) The commission shall assess a surcharge for the disposal of nonparty compact waste at the compact waste disposal facility. The surcharge is 20 percent of the total contracted rate under Section 401.2456 and must be assessed in addition to the total contracted rate under that section.

(h) A surcharge collected under Subsection (g) shall be deposited to the credit of the low-level radioactive waste fund.

(h-1) The commission shall conduct a study of the surcharge described by Subsection (g) and, not later than December 1, 2016, shall issue the results of the review to the legislature. The

commission shall review the operations and expenses of the compact waste disposal facility license holder and shall require the compact waste disposal facility license holder to provide justification of disposal expenses and historical costs associated with the facility through appropriate evidentiary and empirical records, studies, and other applicable methodologies. The commission shall consider the impact of the surcharge on the overall revenue generated for the state and may request the assistance of the comptroller in conducting the analysis of the impact of the surcharge.

(i) The Texas Low-Level Radioactive Waste Disposal Compact Commission by rule shall adopt procedures and forms for the approval of the importation of nonparty compact waste.

(j) An application for the approval of the importation of nonparty compact waste may be submitted to the Texas Low-Level Radioactive Waste Disposal Compact Commission only by the generator of the waste.

(k) The commission, in coordination with the Texas Low-Level Radioactive Waste Disposal Compact Commission, shall 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 under this subsection established by commission rule are binding on any criteria and thresholds that may be established by the Texas Low-Level Radioactive Waste Disposal Compact Commission.

SECTION 3. Subchapter F, Chapter 401, Health and Safety Code, is amended by adding Sections 401.208 and 401.2085 to read as follows:

Sec. 401.208. STUDY OF CAPACITY. (a) The commission shall conduct a study on the available volume and curie capacity of the compact waste disposal facility for the disposal of party state compact waste and nonparty compact waste.

(b) The commission shall consider and make recommendations regarding:

(1) the future volume and curie capacity needs of party state and nonparty state generators and any additional reserved capacity necessary to meet those needs;

(2) the calculation of radioactive decay related to the compact waste disposal facility and radiation dose assessments based on the curie capacity;

(3) the necessity of containerization of the waste;

(4) the effects of the projected volume and radioactivity of the waste on the health and safety of the public;
and

(5) the costs and benefits of volume reduction and stabilized waste forms.

(c) Not later than December 1, 2012, the commission shall submit a final report of the results of the study to the standing committees of the senate and the house of representatives with jurisdiction over the disposal of low-level radioactive waste.

(d) The Texas Low-Level Radioactive Waste Disposal Compact

Commission shall use the study to anticipate the future capacity needs of the compact waste disposal facility.

(e) The commission may conduct a study described by Subsection (a) at any time after December 1, 2012, if the commission determines that a study is necessary.

Sec. 401.2085. REVIEW OF FINANCIAL ASSURANCE. (a) The commission shall conduct a review of the adequacy of the financial assurance mechanisms of the compact waste disposal facility license holder that were approved by the commission before January 1, 2011, against projected post-closure costs, including a review of the adequacy of funds for unplanned events. The review shall consider:

(1) the segregation of financial assurance funds from other funds;

(2) the degree of risk that the financial instruments are subject to financial reversal;

(3) potential post-closure risks associated with the compact waste disposal facility; and

(4) the adequacy of the financial instruments to cover the state's liabilities.

(b) Not later than December 1, 2012, the commission shall submit a final report of the results of the review to the standing committees of the senate and the house of representatives with jurisdiction over the disposal of low-level radioactive waste.

SECTION 4. The heading to Section 401.245, Health and Safety Code, is amended to read as follows:

Sec. 401.245. PARTY STATE COMPACT WASTE DISPOSAL FEES.

SECTION 5. Section 401.245, Health and Safety Code, is amended by amending Subsections (a) and (b) and adding Subsections (g) and (h) to read as follows:

(a) A compact waste disposal facility license holder who receives party state compact [~~low level radioactive~~] waste for disposal pursuant to the compact [~~Texas Low Level Radioactive Waste Disposal Compact established under Chapter 403~~] shall have collected a waste disposal fee to be paid by each person who delivers party state compact [~~low level radioactive~~] waste to the compact waste disposal facility for disposal.

(b) The commission by rule shall adopt and periodically revise party state compact waste disposal fees under this section according to a schedule that is based on the projected annual volume of low-level radioactive waste received, the relative hazard presented by each type of low-level radioactive waste that is generated by the users of radioactive materials, and the costs identified in Section 401.246.

(g) For the purposes of a contested case involving the adoption of fees under this section, only a party state generator of low-level radioactive waste may be considered a person affected.

(h) The administrative law judge assigned to the contested case involving the adoption of fees under this section shall issue a proposal for decision on fees proposed by the commission not later than the first anniversary of the date the State Office of Administrative Hearings assumes jurisdiction of the case.

SECTION 6. Subchapter F, Chapter 401, Health and Safety Code,

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is amended by adding Sections 401.2455 and 401.2456 to read as follows:

Sec. 401.2455. INTERIM PARTY STATE COMPACT WASTE DISPOSAL FEES. (a) The commission's executive director may establish interim party state compact waste disposal fees effective only for the period beginning on the date the compact waste disposal facility license holder is approved to accept waste at the disposal facility and ending on the effective date of the rules establishing the fees under Section 401.245. A generator is not entitled to a refund, and may not be charged a surcharge, for the disposal of waste under interim fees once the final fees have been adopted.

(b) An extension of the period during which interim rates apply may not be granted. If the State Office of Administrative Hearings has not issued a proposal for decision before the expiration of the period under Section 401.245(h), all disposal at the compact waste disposal facility must cease until the rates are adopted.

Sec. 401.2456. CONTRACTS FOR NONPARTY COMPACT WASTE DISPOSAL.

(a) At any time after the commission has granted approval to begin operating the compact waste disposal facility, the compact waste disposal facility license holder may contract rates with nonparty compact waste generators for the disposal of nonparty compact waste at the facility in accordance with the compact waste disposal facility license.

(b) Rates and contract terms negotiated under this section are subject to review and approval by the commission's executive

director to ensure they meet all of the requirements of this section.

(c) Rates negotiated under this section must be set both by a price per curie and a price per cubic foot. Fees resulting from the negotiated rates must be greater than, as applicable:

(1) the compact waste disposal fees under Section 401.245 as set by the commission that are in effect at the time the rates are negotiated; or

(2) the interim compact waste disposal fees under Section 401.2455 as set by the commission's executive director that are in effect at the time the rates are negotiated.

(d) A contract under this section must:

(1) be negotiated in good faith;

(2) conform to applicable antitrust statutes and regulations; and

(3) be nondiscriminatory.

(e) Rates set under this section must generate fees sufficient to meet the criteria for party state compact waste under Sections 401.246(a) and (c).

SECTION 7. Section 401.246, Health and Safety Code, is amended by amending Subsection (a) and adding Subsection (c) to read as follows:

(a) Party state compact [~~Compact~~] waste disposal fees adopted by the commission under Section 401.245 must be sufficient to:

(1) allow the compact waste facility license holder to recover costs of operating and maintaining the compact waste

disposal facility and a reasonable profit on the operation of that facility;

(2) provide an amount necessary to meet future costs of decommissioning, closing, and postclosure maintenance and surveillance of the compact waste disposal facility and the compact waste disposal facility portion of the disposal facility site;

(3) provide an amount to fund local public projects under Section 401.244;

(4) provide a reasonable rate of return on capital investment in the facilities used for management or disposal of compact waste at the compact waste disposal facility; and

(5) provide an amount necessary to pay compact waste disposal facility licensing fees, to pay compact waste disposal facility fees set by rule or statute, and to provide security for the compact waste disposal facility as required by the commission under law and commission rules.

(c) In determining compact waste disposal fees, the commission shall only consider capital investment in property by the compact waste disposal facility license holder that is used and useful to the compact waste disposal facility as authorized under this chapter. The commission may not consider the capital investment costs or related costs incurred before September 1, 2003, in determining disposal fees.

SECTION 8. Subsection (b), Section 401.248, Health and Safety Code, is amended to read as follows:

(b) The state may enter into compacts with another state or

several states for the disposal in this state of low-level radioactive waste only if the compact:

(1) limits the total volume of all low-level radioactive waste to be disposed of in this state from the other party state or party states to 20 percent of the annual average of low-level radioactive waste projected to be disposed of [~~that the governor projects will be produced~~] in this state from [~~the years~~] 1995 through 2045;

(2) gives this state full administrative control over management and operation of the compact waste disposal facility;

(3) requires the other state or states to join this state in any legal action necessary to prevent states that are not members of the compact from disposing of low-level radioactive waste at the compact waste disposal facility;

(4) allows this state to charge a fee for the disposal of low-level radioactive waste at the compact waste disposal facility;

(5) requires the other state or states to join in any legal action involving liability from the compact waste disposal facility;

(6) requires the other state or states to share the full cost of constructing the compact waste disposal facility;

(7) allows this state to regulate, in accordance with federal law, the means and routes of transportation of the low-level radioactive waste in this state;

(8) requires the other state or states to pay for

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community assistance projects selected by the host county in an amount not less than \$1 million or 10 percent of the amount contributed by the other state or states;

(9) is agreed to by the Texas Legislature, the legislature of the other state or states, and the United States Congress; and

(10) complies with all applicable federal law.

SECTION 9. Section 401.250, Health and Safety Code, is amended to read as follows:

Sec. 401.250. PAYMENTS BY PARTY STATES. (a) Notwithstanding any other provision of law, Act of the legislature or the executive branch, or any other agreement, the initial payment of \$12.5 million due from each nonhost party state under Section 5.01 of the compact established under Section 403.006 is due not later than November 1, 2003. In accordance with Section 7.01 of the compact, the host state establishes the following terms and conditions for a state to become a party state to the compact after January 1, 2011:

(1) the state must make an initial payment of half of the total amount due to the host state under Subsection (b) on the later of September 1, 2011, or the date the state becomes a party state; and

(2) the state must pay the remainder of the amount owed under Subsection (b) on the later of the date of the opening of the compact waste disposal facility or the date the facility first accepts waste from the state.

(b) Each state that becomes a party state:

(1) after January 1, 2011, and before September 1, 2018, shall contribute a total of \$30 million to the host state, including the initial payment under Subsection (a)(1); and

(2) on or after September 1, 2018, and before September 1, 2023, shall contribute \$50 million to the host state, including the initial payment under Subsection (a)(1).

(c) The requirements of this section apply to a state that becomes a party state after January 1, 2011, regardless of whether the state had previously been a party to the compact. A state that has withdrawn as a party state shall pay the previously committed fee of \$25 million in addition to the fees set in Subsection (b).

(d) A payment made under this section may not be refunded, even if a party state withdraws from the compact.

(e) For the purposes of calculating the amount of a payment required under Section 4.05(5) of the compact, the amount of a payment under this section is considered to be a payment under Article V of the compact.

(f) This section prevails over any other law or agreement in conflict or inconsistent with this section.

SECTION 10. Section 401.271, Health and Safety Code, is amended by adding Subsection (c) to read as follows:

(c) A holder of a license or permit issued by the commission under this chapter or Chapter 361 that authorizes the storage, other than disposal, of a radioactive waste or elemental mercury from other persons shall remit each quarter to the commission for deposit into the general revenue fund an amount equal to 20 percent

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of the license or permit holder's gross receipts received from the storage of the substance for any period exceeding one year. This subsection applies only to the storage of the substance for any period exceeding one year. This subsection applies only to the storage of radioactive waste or elemental mercury at or adjacent to the compact waste disposal facility.

SECTION 11. Subsection (d), Section 401.248, Health and Safety Code, is repealed.

SECTION 12. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2011.

President of the Senate

Speaker of the House

I hereby certify that S.B. No. 1504 passed the Senate on April 13, 2011, by the following vote: Yeas 31, Nays 0; and that the Senate concurred in House amendments on May 25, 2011, by the following vote: Yeas 31, Nays 0.

Secretary of the Senate

I hereby certify that S.B. No. 1504 passed the House, with amendments, on May 18, 2011, by the following vote: Yeas 91, Nays 38, one present not voting.

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Chief Clerk of the House

Approved:

Date

Governor