

The Texas Commission on Environmental Quality (commission) proposes amendments to §§336.1, 336.2, 336.11, 336.103, 336.111, 336.113, 336.203, 336.207, 336.209, 336.211, 336.305, 336.363, 336.501, 336.701, 336.702, 336.705, 336.707 - 336.709, 336.711, 336.716, 336.718, 336.720, 336.723, 336.728 - 336.730, 336.733, 336.735 - 336.737, and 336.743. The commission also proposes new §§336.9, 336.703, 336.704, 336.717, 336.738, 336.801, 336.803, 336.805, 336.807 - 336.809, 336.811, 336.813, 336.815, 336.817, 336.819, 336.821, 336.823, 336.825, 336.901, 336.903, 336.905, 336.907, and 336.909 and the repeal of §336.703.

#### **BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES**

The changes proposed to this chapter are part of a larger proposal to revise the commission's radiation control rules. The primary purpose of the proposed rules is to implement House Bill (HB) 1567, 78th Legislature, 2003, and its amendments to Texas Health and Safety Code, Chapter 401 (also known as the Texas Radiation Control Act). The bill provides for the licensing of a low-level radioactive waste (LLRW) disposal facility and establishes procedures for the commission to accept and evaluate license applications from private entities to dispose of LLRW. After a review for comparative merit, the commission may refer one application, after technical review and public comment, to the State Office of Administrative Hearings (SOAH) for a contested case hearing, if requested by applicant or an affected person, or if the commission determines a hearing would be in the public interest. The commission intends to address additional provisions of HB 1567, such as the compact waste disposal fees, in a future rulemaking.

HB 1567 repeals Texas Health and Safety Code, Chapter 402 (the Texas Low-Level Radioactive Waste Disposal Authority Act) in its entirety. This repeal eliminates most of the duties and responsibilities that were transferred from the Texas Low-Level Radioactive Waste Disposal Authority to the Texas Natural Resource Conservation Commission, the predecessor to the Texas Commission on Environmental Quality, effective September 1, 1999. HB 1567 retained authority with the commission for specific support and liaison responsibilities related to LLRW that were part of the duties of the abolished Texas Low-Level Radioactive Waste Disposal Authority. HB 1567 also repealed Texas Health and Safety Code, §401.203 (License Restricted to Public Entity), which provided that an LLRW disposal license be issued only to a public entity specifically authorized for LLRW disposal.

Under federal law, Texas is responsible for managing the LLRW generated within its borders. Texas entered into an agreement designated as the Texas Low-Level Radioactive Waste Disposal Compact with the states of Maine and Vermont where Texas will provide for an LLRW disposal facility. The Texas Low-Level Radioactive Disposal Waste Compact was ratified by the United States Congress and signed by President Clinton in September 1998. The State of Maine passed emergency legislation to withdraw from the Texas Low-Level Radioactive Disposal Waste Compact in April 2002. The withdrawal of Maine is scheduled to take effect in April 2004.

Texas is an "Agreement State" for the regulation of LLRW disposal under the Atomic Energy Act of 1954, as amended. Section 274 of the Atomic Energy Act provides a statutory basis under which the United States Nuclear Regulatory Commission (NRC) relinquishes to Texas portions of its regulatory authority to license and regulate specific radioactive material. The transfer agreement of this federal

authority to the state is signed by the Governor and the Chair of the NRC. As part of this agreement, the commission must remain compatible in its rules and policies related to LLRW disposal and is subject to periodic review by the NRC for compatibility.

The commission exercises certain authority ceded to the state by the NRC under the *Articles of Agreement Between the United States Nuclear Regulatory Commission and the State of Texas for Discontinuance of Certain Commission and Regulatory Authority and Responsibility within the State Pursuant to Section 274 of the Atomic Energy Act of 1954, as Amended*. The commission's proposed rules address matters relating to this regulatory authority. The primary purpose of the proposed rulemaking is to revise the commission's application processing and licensing requirements for the disposal of LLRW at the compact waste disposal facility or federal facility waste disposal facility and implement the provisions of two federal NRC rulemakings relating to skin dose and deliberate misconduct. The commission recognizes that issues concerning radioactive materials are very complex and may involve various state and federal agencies. The proposed rulemaking is not intended to address matters that are not within the jurisdiction of the commission, such as matters under the jurisdiction of the Texas Department of Health or the Texas Low-Level Radioactive Waste Disposal Compact Commission, authority retained by the NRC, or matters preempted by federal law.

HB 1567 provides that the commission may license federal facility waste disposal at a separate and distinct facility that is operated exclusively for the disposal of federal facility waste and that is adjacent to the compact waste disposal facility. Before accepting federal facility waste, the license holder must submit to the commission a written statement, signed by an official of the federal government, stating

that the federal government will assume all required right, title, and interest in land and buildings acquired for the disposal of federal facility waste in accordance with the Federal Nuclear Policy Act of 1982, Subtitle D (42 United States Code (USC), §§10171 *et seq.*), as amended. For the first five years after issuance of a license, the overall capacity of the federal facility waste disposal facility is limited to not more than three million cubic yards. The capacity may then be increased to a total volume of six million cubic yards unless the commission makes an affirmative finding that increasing the capacity of the federal facility waste disposal facility would pose a significant risk to human health, public safety, or the environment. A major amendment to the LLRW facility license would be required to increase the volume capacity for federal facility waste, even in the absence of an affirmative finding by the commission. New definitions for “Compact,” “Compact waste,” “Compact waste disposal facility,” “Federal facility waste,” “Federal facility waste disposal facility,” “Host state,” “Mixed waste,” “Party state,” and “Perpetual care account” are proposed for §336.2 to implement the new statutory requirements. New Chapter 336, Subchapter I and Subchapter J are also proposed to implement the statute.

HB 1567 specifically authorizes that mixed waste may be disposed of at the LLRW disposal facility. “Mixed waste” is a combination of hazardous waste as defined by Texas Health and Safety Code, Chapter 361 (also known as the Solid Waste Disposal Act) and LLRW. “Mixed waste” also includes federal mixed waste as proposed in §336.2. The compact waste disposal facility license holder, in accepting mixed waste at the compact waste disposal facility or a federal facility waste disposal facility, must comply with Chapter 361; Texas Health and Safety Code, Chapter 401; and the Resource Conservation and Recovery Act of 1976 (42 USC, §§6901 *et seq.*), as amended. Specific license

conditions related to mixed waste will be incorporated into an LLRW disposal license issued by the commission.

*Discussion of Texas Health and Safety Code, §401.216, Acquisition of property.*

Ownership of property in fee, that is, both the surface rights and the mineral rights, must be demonstrated for an administratively complete application. This ownership is directly related to the ability to transfer property to the state or federal government prior to accepting waste that must also be demonstrated for an administratively complete application. Land ownership requirements are provided in federal rules and in existing state rules, as a matter of NRC compatibility. HB 1567 allows for possible deviations from existing land ownership requirements that necessitate an applicant requesting possible exemptions under §336.5. The commission has the ability to grant exemptions under §336.5 if it determines that the exemption is not prohibited by law and will not will result in a significant risk to public health and safety or the environment. Persons requesting an exemption must demonstrate that the proposed alternative approach is as protective to the public and the environment as the existing requirements from which an exemption is being requested. Such requests for exemptions from specific requirements by an applicant must be included in an administratively complete application for LLRW disposal.

HB 1567 specifies an application selection process for a compact waste disposal facility license. Not later than January 1, 2004, the commission shall publish notice in the *Texas Register* that applications for the siting, construction, and operation of a facility or facilities for disposal of LLRW will be accepted by the commission for a 30-day period, beginning 180 days after the date of the notice. All

applications received will be evaluated by the commission for administrative completeness, and applications deemed administratively complete will be evaluated in accordance with statutory criteria for the purposes of comparing the relative merit of the applications. Based on the written evaluations and the application materials, the commission shall select the application that has the highest comparative merit. The statutory criteria are specified in the form of weighted tiers. These tiers and the application selection process are specified in proposed new Subchapter I.

This rulemaking also implements HB 1678. This bill changes the name of the “radiation and perpetual care fund” to “perpetual care account,” and provides that the account is an account in the general revenue fund. Conforming changes to rules are given in Subchapter H, §336.720 (Post-Closure Observation and Maintenance) and §337.737 (Funding for Institutional Control); and 30 TAC Chapter 37, Subchapter T (Financial Assurance for Near-Surface Land Disposal of Low-Level Radioactive Waste); §37.9045 (Financial Assurance for Closure, Post Closure, Corrective Action, and Liability Coverage); and §37.9050 (Financial Assurance Mechanisms).

Some additional changes outside the scope of the bill implementation are being proposed as part of this rulemaking. This rulemaking implements federal requirements which are necessary to maintain compatibility between federal and state rules.

The amendments of §336.2 and §336.305 are derived from NRC final rulemaking "Revision of the Skin Dose Limit" (66 FR 16298, April 5, 2002), effective June 4, 2002. The commission must incorporate

NRC rulemakings into its rules to preserve the status of the State of Texas as an "Agreement State" authorized to administer a portion of the radiation control program in the state.

The NRC amended its regulations to change the definition and method of calculating "shallow-dose equivalents" by specifying that the assigned shallow-dose equivalents must be the dose averaged over ten square centimeters of skin receiving the highest exposure, rather than one square centimeter as stated in the existing regulation.

This rulemaking makes the skin dose limit less restrictive when small areas of skin are irradiated and to address skin and extremity doses from all source geometries under a single limit. This change requires measuring or calculating shallow-dose equivalents from discrete radioactive particles on or off the skin, from very small areas (1.0 square centimeter) of skin contamination, and from any other source of shallow-dose equivalent, by averaging the measured or calculated dose over the most highly exposed, contiguous ten square centimeters for comparison to the skin dose limit of 50 rem.

The commission concurs with the NRC that previous requirements for skin dose including frequent monitoring of workers to detect small area exposures might permit more frequent, "transient," observable effects such as reddening of the skin. However, the change to a larger averaging area will result in no more than insignificant health implications and in other aspects will reduce hazards and increase protection. When the standard measurement area was one centimeter, workers were required to wear multiple layers of protective clothing that resulted in workers being subjected to non-radiological hazards, such as heat stress. In addition, workers' mobility and dexterity were hampered

by the redundant use of protective equipment and clothing which required them to spend more time completing a job in radiation areas. Therefore, the previous redundant use of protective clothing and other equipment to avoid small area skin contamination may in fact expose workers to more significant hazards than are being avoided.

Proposed new §336.9 is derived from NRC final rulemaking "Deliberate Misconduct by Unlicensed Persons" (63 FR 1890, January 13, 1998), effective February 12, 1998. The commission must incorporate NRC rulemakings into its rules to preserve the status of the State of Texas as an "Agreement State" authorized to administer a portion of the radiation control program in the state.

The NRC enacted this rule to be able to take enforcement action against an unlicensed person, such as an employee, contractor, or consultant, or take other administrative action directly against a person, such as issuance of a notice of violation, who deliberately causes a licensee to be in violation of a requirement, provides material inaccurate information to a licensee, or provides material inaccurate information to a regulator. Similarly, by adopting this rule, any person who knowingly violates a state rule or requirement would be subject to enforcement action under Texas Water Code, Chapter 7, and Texas Health and Safety Code, §401.393.

Various sections are proposed to be amended to change the name of this commission from the "Texas Natural Resource Conservation Commission" to the "Texas Commission on Environmental Quality" to implement HB 2912, 77th Legislature, 2001, §18.01. Typographical error corrections and other amendments to improve readability are proposed.

## SECTION BY SECTION DISCUSSION

### *SUBCHAPTER A: GENERAL PROVISIONS*

#### *Section 336.1, Scope and General Provisions*

Section 336.1(e) is proposed to be amended to change "Texas Natural Resource Conservation Commission" to "Texas Commission on Environmental Quality," implementing HB 2912, §18.01. Subsection (f)(2) is proposed to be amended to delete the requirement that only a public entity may receive LLRW from other persons for the purpose of disposal, reflecting the repeal of Texas Health and Safety Code, §401.203 in HB 1567. Specifically, the word "person" is substituted for "public entity."

#### *Section 336.2, Definitions*

Section 336.2 is proposed to be amended to make it compatible with the latest version of Title 10 Code of Federal Regulations (CFR) §20.1003. The definition of "Shallow-dose equivalent (H<sub>s</sub>)" is specifically proposed to be amended to add after "skin," the words "of the whole body" and after "or," the words "the skin of" to clarify that the definition applies to the skin of the whole body or to the skin of an extremity. The definition is also proposed to be amended to delete "averaged over an area of one square centimeter" to agree with the amendment proposed to §336.305(c) for averaging over ten square centimeters of skin. Additional definitions for "Compact," "Compact waste," "Compact waste disposal facility," "Federal facility waste," "Federal facility waste disposal facility," "Host state," "Mixed waste," "Party state," and "Perpetual care account" are proposed for §336.2 to implement the new statutory requirements of HB 1567. The definitions are renumbered accordingly. The definition of "Hazardous waste" is proposed to be added to provide a reference to 30 TAC Chapter 335 (Industrial Solid Waste and Municipal Hazardous Waste). The definition of "Radiation and perpetual

care fund” is proposed to be amended by changing the term to “Radiation and perpetual care account.”

This amendment is proposed to provide consistency with HB 1567 and HB 1678. The definition of “Licensee” is proposed to be amended to delete an unnecessary acronym and provide a correct citation to Texas Health and Safety Code, Chapter 401. The definition of “Violation” is proposed to be amended to spell out the acronym TRCA as “Texas Radiation Control Act.”

*Section 336.9, Deliberate Misconduct*

New §336.9 is proposed to implement federal requirements given in 10 CFR §61.9b. The proposed section would subject certain persons specified in rule to enforcement action for deliberate misconduct. Deliberate misconduct may involve providing information that is known to be incomplete or inaccurate in some respect material to the commission, or it may involve conduct that causes or would have caused, if not detected, a licensee or applicant to be in violation of any of the commission’s requirements.

*Section 336.11, Memorandum of Understanding Between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions*

The proposed amendments to §336.11 reflect the commission's name change. The title of the section is amended to delete "Texas Natural Resource Conservation Commission." At the end of the section, the name of the commission is changed to the new name to correct the address from which to request a copy of the memorandum of understanding. These amendments implement the commission name change in HB 2912, §18.01.

*SUBCHAPTER B: RADIOACTIVE SUBSTANCE FEES*

*Section 336.103, Schedule of Fees for Subchapter H Licenses*

The proposed amendment to §336.103(a) would implement HB 1567, §401.229, and would change the license application processing fee from \$415,000 to \$500,000, and would make the fee nonrefundable.

The proposed amendment would also provide that if the commission's costs in processing an application under Subchapter H exceed the \$500,000 application processing fee, the commission may assess and collect additional fees from the applicant to recover the costs. The proposed amendments to §336.103(c) would implement HB 1567, §401.206, and would provide for the expenses of more than one resident inspector.

*Section 336.111, Method of Payment of Fees*

The proposed amendment to §336.111 would change "Texas Natural Resource Conservation Commission" to "Texas Commission on Environmental Quality" to implement HB 2912, §18.01.

*Section 336.113, Failure to Pay Prescribed Annual Fees*

The proposed amendments to §336.113 would provide a reference to 30 TAC Chapter 12 (Payment of Fees) to identify the manner in which penalties and interest are assessed for the late payment of fees.

## SUBCHAPTER C: GENERAL DISPOSAL REQUIREMENTS

### *Section 336.203, License Required*

The proposed amendment to §336.203 would change "Texas Natural Resource Conservation Commission" to "Texas Commission on Environmental Quality" to implement HB 2912, §18.01, and delete the acronym "TDH" because it is not used again within the section.

### *Section 336.207, General Requirements for Issuance of a License*

The proposed amendment would add the phrase "of this chapter (relating to Radioactive Substance Rules)" to denote that the "applicable chapter" refers to Chapter 336.

### *Section 336.209, Issuance of License*

The proposed amendments would change the phrase "agency rules" to "commission rules" and would correct the spelling of the term "radioactive."

### *Section 336.211, General Requirements for Radioactive Material*

The proposed amendment to §336.211(f) would replace the term "public entity" with the term "person" because HB 1567 repealed Texas Health and Safety Code, §401.203.

## SUBCHAPTER D: STANDARDS FOR PROTECTION AGAINST RADIATION

### *Section 336.305, Occupational Dose Limits for Adults*

The proposed amendments to §336.305 make it compatible with the latest version of NRC's 10 CFR §20.1201. Section 336.305(a)(2) is proposed to be amended to add after "skin" the words "of the

whole body" and before "extremities" the words "the skin of" to clarify that the annual limits apply to the skin of the whole body and to the skin of the extremities. Section 336.305(c) is also proposed to be amended to add that the deep-dose equivalent "must be for the part of the body receiving the highest exposure" and that the shallow-dose equivalent must be "averaged over the contiguous ten square centimeters of skin receiving the highest exposure."

*Section 336.363, Appendix F, Requirements for Receipt of Low-Level Radioactive Waste for Disposal at Licensed Land Disposal Facilities and Uniform Manifests*

The proposed amendments delete references to older NRC rule changes in subsections (a)(1)(A); (2)(B), (D), and (E); (3); and (b)(1). The referenced March 27, 1995 NRC rule change had two acceptable versions. In a subsequent November 20, 1998 rule change, the version already incorporated in this rule section was made the final, official version. Unless otherwise specified, an "Agreement State," such as Texas, has three years after the promulgation of an NRC rule change to adopt it in state rules. An NRC rule change is not effective in the "Agreement State" until it is adopted and effective in state rules. When a state adopts NRC rule changes by reference, as in this section, the NRC encourages the state to use its own effective date. The proposed amendments will cite to the appropriate NRC rules, as amended.

*SUBCHAPTER F: LICENSING OF ALTERNATIVE METHODS OF DISPOSAL OF RADIOACTIVE MATERIAL*

*Section 336.501, Scope and General Provisions*

The proposed amendment to §336.501(b) would replace the term “public entity” with the term “person” because HB 1567 repealed Texas Health and Safety Code, §401.203.

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

*Section 336.701, Scope and General Provisions*

Section 336.701(a) is proposed to be amended by deleting the words “for near-surface land disposal of low-level radioactive waste and accelerator-produced radioactive material.” This is done to improve sentence construction and clarity, and to eliminate redundant language. Subsection (b)(1) is proposed to be amended to correct a cross-reference.

*Section 336.702, Definitions*

The proposed amendments to §336.702 would add a definition for “Containerized Class A waste” and would renumber the paragraphs accordingly. This definition is proposed to implement HB 1567, Texas Health and Safety Code, §401.218(c), which provides that the commission by rule may require a compact waste disposal facility license holder to dispose of certain Class A LLRWs that present a hazard because of their high radiation levels in the manner required for Class B and Class C LLRW. The statutory term “high radiation level” has no equivalent definition in current federal or state rules. The proposed definition is consistent with the existing term “high radiation area,” where “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 in one hour at 30 centimeters from any surface of the container that the radiation penetrates. The definition of “Hazardous waste,” is proposed to be deleted because it is redundant with the definition of “Hazardous wastes” given in §336.2.

*Section 336.703, License Required - Repeal*

Existing §336.703 is proposed to be repealed because it is redundant of the requirement in §336.701(a) that states: "No person shall engage in disposal of low-level radioactive waste received from other persons except as authorized in a specific license issued under this subchapter."

*Section 336.703, Concepts*

New §336.703 is proposed to incorporate the concepts and requirements of 10 CFR §61.7 (Concepts). These are NRC program elements that have particular health and safety significance. The essential objectives of these program elements are necessary to maintain an adequate program. In addition, this proposed new rule provides many of the concepts that make the rest of the subchapter understandable.

*Section 336.704, Applications for License of Compact Waste Disposal Facility*

New §336.704 is proposed to provide requirements for applications for licenses to dispose of LLRW at the “Compact” waste disposal facility. New subsection (a) is proposed to provide that only one license to dispose of LLRW from other persons may be issued by the commission, which implements HB 1567, §401.202(b). New subsection (b) is proposed to provide that the compact waste disposal facility licensed under this subchapter is the regional disposal facility established and operated under the

compact established under Texas Health and Safety Code, Chapter 403 for purposes of the federal Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 USC, §2021b-2021j). New subsection (b) implements HB 1567, §401.214.

*Section 336.705, Content of Application*

Section 336.705 is proposed to be amended to include the words “low-level radioactive” in the first sentence and to improve grammar.

*Section 336.707, Specific Technical Information*

The proposed amendments to §336.707(6) require that an application for disposal of LLRW include a description of any prior disposal containing radioactive material at the site. An accurate accounting of all radionuclides is essential so that the performance objective for the site can be demonstrated.

*Section 336.708, Environmental Information*

Section 336.708 is proposed to be amended by designating existing rule language as subsection (a). Paragraph (11) is proposed to be amended to add language to specify that the closure plan is also to cover site stabilization, which would be compatible with 10 CFR §61.7(c)(2), and to specify that the intent is to eliminate the need for active maintenance "after closure," and to require an estimated date of site closure for planning purposes. New subsection (b) is proposed for compatibility with 10 CFR §61.10. This NRC rule states: "An environmental report prepared in accordance with subpart A of part

51 of this chapter must accompany this application." Proposed new subsection (b) incorporates the environmental report requirements.

*Section 336.709, Technical and Environmental Analyses*

Section 336.709 is a list of demonstrations which an applicant must make as part of the technical and environmental portion of the application. Cross-references to existing performance standards are proposed to be added to ensure that the correct demonstrations are submitted to the agency. Implied subsection (a) is proposed to be amended by adding a cross-reference to the performance objectives in §336.723. Paragraph (1) is proposed to be amended by adding language that specifically requires that the potential effects on the general population be evaluated for a minimum period of 1,000 years after closure or the period where peak dose occurs, whichever is longer. Paragraph (2) is proposed to be amended by adding a cross-reference to the performance objective for inadvertent intrusion in §336.725. Paragraph (3) is proposed to be amended by adding a cross-reference to the performance objective for protection of individuals during operations in §336.726. Paragraph (4) is proposed to be amended by adding a cross-reference to the performance objective for stability of the disposal site after closure in §336.727.

*Section 336.711, Financial Information*

The proposed amendments to §336.711 would add cross references to other rule sections that provide more detailed information on financial qualification and financial assurance requirements.

*Section 336.716, Terms and Conditions of License*

The proposed amendment to §336.716(c) is intended to provide a citation to Texas Health and Safety Code, Chapter 401. The proposed amendment to §336.716(h) would require an initial license term of 15 years rather than a fixed licensing period of 20 years in accordance with new Texas Health and Safety Code, §401.222. A new sentence is also proposed to be added stating: "After the initial 15 years, the commission may renew the license for one or more terms of ten years." This sentence is proposed to be added to implement new Texas Health and Safety Code, §401.222. Proposed new subsection (i) provides that the compact waste disposal facility license must require the license holder to indemnify the state for any liability imposed on the state under state or federal law for the disposal of federal facility waste. This provision implements HB 1567, §401.211(c).

*Section 336.717, Conveyance of Waste*

A new §336.717 is proposed to specify criteria by which title to compact waste is conveyed to the state which implements HB 1567, §401.2051. Proposed subsection (a) provides that title to the waste is conveyed to the state at the time the waste is accepted at the disposal site. Proposed subsection (b) provides that title and all related rights and interest in the compact waste are the property of the commission on the state's behalf.

*Section 336.718, Application for Renewal or Closure*

The proposed amendments to §336.718(a) would change the time requirement on applying for a license renewal from 30 days before license expiration to one year before license expiration.

*Section 336.720, Post-closure Observation and Maintenance*

The amendment to §336.720 would add new subsection (b) which states “Upon transfer of the license to the custodial agency, the licensee will be released from the requirements of liability coverage under Chapter 37, Subchapter T of this title (relating to Financial Assurance for Near-Surface Land Disposal of Radioactive Waste).”

*Section 336.723, General Requirement*

The title for the §336.723 is proposed to be changed to “Performance objective” because this is a more descriptive term for the sections which are referred to in this section.

*Section 336.728, Disposal Site Suitability Requirements for Near-Surface Land Disposal*

Section 336.728(k) is proposed to be amended to add a requirement that “If activities involving radioactive material were previously performed on the site, the applicant shall evaluate the contribution of those activities that may impact the ability of the site to meet performance objectives.” New §336.728(m) - (p) are proposed to further delineate areas unsuitable for the disposal site, which implement HB 1567, §401.217.

*Section 336.729, Disposal Site Design for Near-Surface Land Disposal*

New §336.729(g) is proposed to implement HB 1567, §401.220, with respect to hazards from local meteorological or geologic conditions.

*Section 336.730, Near-Surface Land Disposal Facility Operation and Disposal Site Closure*

The proposed amendments to §336.730(a) would improve formatting and update a section title. The proposed amendments to §336.730(b) would reorganize the subsection to provide specific requirements for disposal of containerized Class A LLRW, as defined at §336.702(5), as well as Class B and Class C LLRWs. These types of wastes must be disposed of within a reinforced concrete container and within a reinforced concrete barrier. These types of wastes must also be disposed of in such a manner that the waste can be monitored and retrieved. These new requirements implement HB 1567, §401.218.

*Section 336.733, Waste Classification, Characteristics, and Labeling*

The proposed amendments to §336.733(a) would require that all LLRW and mixed waste received for disposal must be classified in accordance with the NRC waste classification system. This would include any federal facility waste received for disposal. Proposed new §336.733(c) would require that a licensee comply with the requirements of Chapter 335 for the disposal of mixed waste, and would implement HB 1567, §401.221.

*Section 336.735, Applicant Qualifications and Assurances*

The proposed amendment to §336.735 would require that applicants provide proof of funds sufficient to cover any annual license fee and any agency costs of processing the application that may exceed the \$500,000 application processing fee.

*Section 336.736, Funding for Disposal Site Closure and Stabilization*

The proposed amendments to §336.736 would change the title to Liability Coverage and Funding for Disposal Site Closure and Stabilization. Subsection (c) is proposed to be amended by adding the words “and cost estimates” to specify that cost estimates will also be reviewed annually because it is the cost estimate that provides the basis for any required adjustment in financial assurance. A new subsection (e) is proposed to be added to require that before commencement of operations, the applicant shall provide financial assurance for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations of the compact waste disposal facility and/or federal facility waste disposal facility in a manner that meets the requirements of Chapter 37. The new section title and new subsection implement HB 1567, §401.233 and §401.112.

*Section 336.737, Funding for Institutional Control*

The proposed amendments to §336.737(a) would change the term “Radiation and Perpetual Care Fund” to “perpetual care account” to implement HB 1567, §401.052(d). Language is also proposed to be added to subsection (a) to provide the method of calculation of an amount of funding for "perpetual" institutional control by the state. The language is derived from NRC's *Draft Regulatory Guide DG-4006, Demonstrating Compliance with the Radiological Criteria for License Termination*, dated August 1998. Section 4.2.3 of the guide (Amount of Financial Assurance) states: "For funds placed into an account segregated from the licensee's assets and outside its administrative control, the financial assurance fund may be assumed to earn a real (i.e., inflation adjusted, after tax) rate of return of 2% per year . . . . Therefore, if perpetual control and maintenance were planned, the financial assurance funding would be 50 times the first year annual cost . . . ." Subsection (b) is proposed to be amended

by substituting “Prior to the commencement of operations” for “During the term of the license before the institutional control period” to require that financial assurance for the institutional control period must be in place in the same manner as required for disposal site closure and stabilization, liability coverage, and corrective action. Active operation of the facility could end at any time during the term of the license, and decommissioning could be required, triggering the need for funding from financial assurance. Cessation of operations would impact the ability of the license holder to fund financial assurance; therefore, the statutory requirements of Texas Health and Safety Code, §401.109 and §401.241, requiring that financial security to fund closure, corrective action, and institutional control is available at the time of decommissioning are met by ensuring that financial assurance is in place prior to the commencement of facility operations.

*Section 336.738, Funding for Corrective Action*

This proposed new section requires that the amount of security required of a license holder under this section shall not be less than \$20 million at the time the disposal facility site is decommissioned. The proposed amendment conforms with new statutory requirements given in Texas Health and Safety Code, §401.241(b). Proposed new subsection (a) requires that financial assurance for corrective action be in place prior to the commencement of operations for the same reasons as outlined in the preamble discussion of §336.737. Corrective action is proposed to be defined in §37.9035 (Definitions), as the activities to remediate unplanned events that pose a risk to public health and safety and that may occur after the decommissioning and closure of the compact waste disposal facility or a federal facility waste disposal facility. Proposed new subsection (b) states that the payment schedule will be determined by

the executive director. The payment schedule will be a condition of the LLRW disposal license.

Proposed new subsection (c) provides the cross-reference to Chapter 37, Subchapter T.

*Section 336.743, Resident Inspector*

The proposed amendments to §336.743 would change the title to “Resident Inspectors” and provide for two or more resident inspectors, which implements HB 1567, §401.206.

*NEW SUBCHAPTER I: COMPACT WASTE DISPOSAL FACILITY APPLICATION SELECTION  
PROCESS*

*Section 336.801, Applicability*

New §336.801 is proposed to provide a statement of general applicability for Subchapter I, which implements HB 1567. This subchapter describes the procedures for submitting and evaluating license applications to receive, possess, and dispose of LLRW from others at the compact waste disposal facility.

*Section 336.803, Receipt of License Applications*

New §336.803 is proposed to specify the procedures the agency must follow to publish notice to receive applications for the siting, construction, and operation of a facility or facilities for disposal of LLRW.

The proposed rule implements HB 1567, §401.228 and §401.230. The statute requires that the commission shall publish notice in the *Texas Register* not later than January 1, 2004.

*Section 336.805, Application Requirements*

New §336.805 is proposed to provide general requirements for submittal of applications. Subsection (a)(2) implements HB 1567, §401.229, and provides that the application must include a non-refundable \$500,000 application processing fee. Subsection (a)(3) implements HB 1567, §401.219, which requires an applicant to provide evidence relating to the reasonableness of any technique for managing LLRW to be practiced at the proposed disposal facility or facilities.

*Section 336.807, Administrative Review*

New §336.807 is proposed to specify the procedures the agency must follow in reviewing license applications and determining if those applications are administratively complete. This section implements HB 1567, §401.230 and §401.231.

*Section 336.808, Ownership of Land and Buildings*

New §336.808 is proposed to require that an application to receive, possess, and dispose of LLRW from others at the compact waste disposal facility may not be considered administratively complete unless the applicant has acquired the title to and any interest in land and buildings on which the facility or facilities are to be located. The requirement for ownership of the land and buildings in “fee simple” is specified in federal and state rules; 10 CFR §61.14 for example, requires ownership in fee by the federal or state government. Similar provisions in existing rules are located at §336.710(2) and §336.734(a). Proposed subsection (b) provides that if an applicant is unsuccessful in acquiring undivided ownership of the mineral estate in fee simple of the land on which the facility or facilities are proposed to be located, the applicant may, to the extent permissible under federal law, request an

exemption of the requirement under §336.5. If the requirement of ownership of the mineral estate in fee simple title is exempted under this subsection, the applicant may enter into a surface use agreement that restricts mineral access, including slant drilling and subsurface mining, to the extent necessary to prevent intrusion into the disposal facility site. This provides compatibility with 10 CFR §61.5(a)(4), which provides that the site may not include areas of known mineral resources which if exploited would result in failure of the performance objectives. Proposed subsection (c) provides that if an applicant cannot reach a surface use agreement and cannot otherwise obtain fee simple title to the mineral estate of the land on which the facility or facilities are proposed to be located, the applicant may petition the commission under 30 TAC §1.8 (Initiation of Proceeding) to request the Texas Attorney General to institute condemnation proceedings as provided under Texas Property Code, Chapter 21, to acquire fee simple interest in the mineral rights. These proposed provisions implement HB 1567, §401.204.

*Section 336.809, Notice of Declaration of Administrative Completeness*

New §336.809 is proposed to provide notice of an administratively complete application in accordance with 30 TAC §39.702 (Notice of Declaration of Administrative Completeness).

*Section 336.811, Public Meeting*

New §336.811 is proposed to require at least one public meeting in the county or counties where a compact waste disposal facility or federal facility waste disposal facility is proposed to be located. The purpose of the public meeting is to receive public comments on the administratively complete applications as provided in 30 TAC §55.253 (Public Comment Processing), and implements HB 1567, §401.232(b).

*Section 336.813, Evaluation of Applications*

New §336.813 is proposed to specify the procedures the agency must follow in reviewing administratively complete license applications and evaluating each application according to the statutory criteria established by Texas Health and Safety Code, §§401.233 - 401.236. The purpose of the evaluation is to compare the relative merit of the applications. This proposed section implements HB 1567, §401.232.

*Section 336.815, Tier 1 Criteria*

New §336.815 is proposed to specify the Tier 1 criteria for evaluation of administratively complete applications, which are listed in HB 1567, §401.233. HB 1567, §401.232 provides that the commission may also adopt criteria in addition to the statutory criteria specified in proposed §336.815, provided that the criteria are consistent with this section.

*Section 336.817, Tier 2 Criteria*

New §336.817 is proposed to specify the Tier 2 criteria for evaluation of administratively complete applications, which are listed in HB 1567, §401.234. HB 1567, §401.232 provides that the commission may also adopt criteria in addition to the statutory criteria specified in proposed §336.817, provided that the criteria are consistent with this section.

*Section 336.819, Tier 3 Criteria*

New §336.819 is proposed to specify the Tier 3 criteria for evaluation of administratively complete applications, which are listed in HB 1567, §401.235. HB 1567, §401.232 provides that the commission

may also adopt criteria in addition to the statutory criteria specified in proposed §336.819, provided that the criteria are consistent with this section.

*Section 336.821, Tier 4 Criteria*

New §336.821 is proposed to specify the Tier 4 criteria for evaluation of administratively complete applications, which are listed in HB 1567, §401.236. HB 1567, §401.232 provides that the commission may also adopt criteria in addition to the statutory criteria specified in proposed §336.821, provided that the criteria are consistent with this section.

*Section 336.823, Technical Review*

New §336.823 is proposed to specify the procedures the agency must follow in reviewing the selected license application of highest comparative merit, and determining if that application is technically complete. This proposed new section implements HB 1567, §401.237. The statute requires that the technical review shall be completed and a draft license prepared not later than the 15th month after the month in which the technical review begins. The executive director shall give priority to the review of the selected application over all other radioactive materials licensing and registration matters pending before the commission.

*Section 336.825, Delegation*

New §336.825 is proposed to provide that the commission delegates to the executive director the authority to review and evaluate applications for radioactive materials licenses under this subchapter and to select the one application under §336.813 for further technical review. A decision by the executive director under §336.813 is not appealable to the commission until the commission makes a final decision on the selected license application.

*NEW SUBCHAPTER J: FEDERAL FACILITY WASTE DISPOSAL FACILITY*

*Section 336.901, Applicability*

New §336.901 is proposed to provide a statement of general applicability for Subchapter J. This proposed subchapter provides additional licensing requirements to the requirements of Subchapter H and other rules of this title for the disposal of federal facility waste at a separate disposal unit at the compact waste disposal facility. This subchapter implements HB 1567, §401.216.

*Section 336.903, Receipt of Waste*

New §336.903 is proposed to provide requirements for the receipt of federal facility waste. Proposed subsection (a) requires that the compact waste disposal facility license holder may not accept federal facility waste for disposal unless the compact waste disposal facility license holder is licensed for its disposal under Texas Health and Safety Code, §401.207. Subsection (b) is proposed to require that a licensee may not accept federal facility waste at a federal facility waste disposal facility until the licensee begins accepting compact waste at the compact waste disposal facility. This provision implements HB 1567, §401.216(e).

*Section 336.905, Volume Limitation*

New §336.905 is proposed to provide statutorily imposed limits on the total volume of federal facility waste which may be disposed of at a federal facility waste disposal facility. Proposed subsection (a) provides that for the first five years after a license is issued under this subchapter, the license shall limit the overall capacity of the federal facility waste disposal facility to not more than three million cubic yards. Of that amount, the total volume of LLRW accepted at the federal facility waste disposal facility that must be disposed of in reinforced concrete containers and within a reinforced concrete barrier, shall be limited to not more than 300,000 cubic yards. Proposed subsection (b) provides that after five years from the date of licensing of the disposal of federal facility waste under this subchapter, the capacity of the federal facility waste disposal facility may be increased by three million cubic yards for a total capacity of six million cubic yards. An application for license amendment under §305.62 will be required to increase the total capacity. Also, there must be a determination by the commission that increasing the capacity of the federal facility waste disposal facility would not pose a significant risk to human health, public safety, or the environment. These proposed provisions implement HB 1567, §401.216(b) and (c).

*Section 336.907, Prohibition of Commingling of Waste*

New §336.907 is proposed to prohibit the commingling of compact waste and federal facility waste. If licensed to dispose of federal facility waste, the licensee shall maintain separate waste transport, waste acceptance, waste processing, and waste disposal of compact waste and federal facility waste. This proposed provision implements HB 1567, §401.216(d).

*Section 336.909, Additional Responsibilities*

New §336.909 is proposed to implement additional statutory requirements. Proposed §336.909(1), which implements HB 1567, §401.205(b)(1), requires the licensee to arrange for and pay the costs of management, control, stabilization, and disposal of federal facility waste and the decommissioning of the licensed federal facility waste disposal activity. Proposed §336.909(2), which implements HB 1567, §401.205(B)(4), requires the licensee to submit to the commission a written agreement by an official of the federal government, stating that the federal government will assume all title and interest in land and buildings acquired for the disposal of federal facility waste, together with requisite rights of access to the land and buildings. Proposed §336.909(3), which implements HB 1567, §401.205(b)(3), requires the licensee to formally acknowledge conveyance of the right, title, and interest in LLRW to the federal government prior to termination of the license. Proposed §336.909(4), which implements HB 1567, §401.210, requires the licensee to transfer LLRW and mixed waste and land and buildings to the federal government without cost to the government, other than the government's administrative and legal costs incurred in making the transfer. Proposed §336.909(5), which implements HB 1567 §401.211(a) - (c), requires the licensee to indemnify the state, and its officers and agents, by license condition for any liability imposed on the state under state or federal law, for damages, removal or remedial action with respect to the land, the facility, or the waste accepted, stored or disposed of, because the transfer does not relieve a license holder of liability for any act or omission before or following the transfer. An existing commission requirement in §336.734 provides that disposal of LLRW received from other persons may be permitted only on land owned in fee by the state or federal government. Ordinarily, the transfer of ownership from a license applicant to the state or federal government occurs at license issuance. However, commission rules in §336.5 provide for an exemption

process. This exemption process is available to applicants seeking to transfer ownership of a federal facility waste disposal facility at decommissioning.

#### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jeffrey Horvath, Analyst, Strategic Planning and Appropriations Section, has determined that for the first five-year period the proposed rules are in effect, there will be fiscal implications for the commission and other units of state and local government as a result of administration or enforcement of the proposed rules.

The rule amendments are proposed as part of a larger proposal in order to implement HB 1567, which provides requirements for the licensing of an LLRW disposal site in Texas and establishes procedures for the commission to accept and evaluate license applications from private entities to dispose of LLRW. A disposal facility may accept "Compact" waste (LLRW generated in Texas, Maine, or Vermont or LLRW that has been approved for importation to this state by the Compact Commission) and may also accept federal facility waste at a separate but adjacent facility. In addition, a disposal facility may accept mixed waste, that is, waste containing both low-level radioactive waste and hazardous waste constituents.

The proposed rules implement legislative requirements in HB 1567, including the repeal of the restriction that an LLRW disposal facility license may only be issued to a public entity. The proposed rules implement procedural requirements for license application submission, review, and selection. The proposed rules also implement federal requirements to maintain compatibility with NRC requirements,

and update existing rules by changing references from the Texas Natural Resource Conservation Commission to the Texas Commission on Environmental Quality.

The commission anticipates fiscal implications as a result of the enforcement or administration of the proposed rules. The 78th Legislature appropriated the commission funding (estimated to be \$954,018 in Fiscal Year 2004 and \$1,049,018 in Fiscal Year 2005 from fees and balances in the Low-Level Radioactive Waste Account), and personnel (five additional full-time equivalent positions in 2004 and 1.5 additional full-time equivalent positions in 2005) to implement HB 1567 and to provide for the licensing of an LLRW disposal facility.

HB 1567 requires a license application fee of \$500,000 and would provide the commission the authority to collect any other fees necessary to license and regulate the site. Even though the bill eliminates Texas Health and Safety Code, Chapter 402, the Low-Level Radioactive Waste Fund (Account 088) is reestablished in Texas Health and Safety Code, Chapter 401, and commission funding would come out of Account 088. The bill directs that any funding received from the two "Compact" states (\$25 million) be collected by November 1, 2003. The State of Maine passed legislation to withdraw from the Texas Low-Level Radioactive Disposal Waste Compact in April 2002. It will take two years for Maine's withdrawal to take effect.

Under the Texas Low-Level Radioactive Waste Disposal Compact, §4.05(5), the host county is entitled to 10% of any payment made to Texas by the party states. Therefore, the host county, wherever that is determined to be, is entitled to \$2.5 million of those payments made to Texas.

The host county of an LLRW disposal facility licensed under the proposed revisions to Chapter 401, Subchapter F would be entitled to 5% (previously 10%) of the gross revenues of all waste receipts to the facility. The bill changed the 10% requirement so that the other 5% of compact waste fee revenue would be deposited to the General Revenue Fund. This fiscal note does not include the fiscal impact of waste disposal fees to any entity, as the commission intends to address the compact waste disposal fees in a future rulemaking.

After a review for comparative merit, the commission may refer one application, after technical review and public comment, to SOAH for a contested case hearing, if requested by the applicant, an affected person, or the commission. The contested case hearing, if required, is anticipated to take place in Fiscal Year 2007 and, SOAH's costs alone are estimated to be \$250,000 and a previous contested case hearing on a license application of similar complexity had estimated commission costs of approximately \$775,000 in 1998. These costs will be borne by the applicant.

Rulemaking, policy, and operational changes will be required to implement the proposed rules, including changes to policy and procedures regarding posting of financial security mechanisms. The commission assumes that the following time line would take place and the commission would receive two license applications for a total of \$1 million in license application fees.

Figure: 30 TAC Preamble-1

**DRAFT TIMELINE**

(Please note that these dates and time periods are only preliminary estimates  
 and are subject to further interpretation and conditions)

<b>Procedural Requirement</b>	<b>Date</b>
The commission prepares for acceptance of low-level radioactive waste disposal applications, and writes necessary rules to accept applications.	Start Rule Writing Process: June 1, 2003. Propose: Aug 6, 2003 Commissioners' Agenda Adopt: Dec 6, 2003 Commissioners' Agenda (189 days)
<p><b>Notice to Receive Applications:</b>            The commission prepares staff and communicates with applicants and other stakeholders in rulemaking process.</p> <p>The commission prepares Notice for Secretary of State. Notice published in <i>Texas Register</i> that applicants have 180 days from January 1, 2004 to prepare applications.</p>	June 1, 2003 to January 1, 2004. (214 days)
<p><b>Applicants prepare applications:</b>            Applicants complete background work on sites under evaluation as potential sites</p>	January 2, 2004 to June 29, 2004. (180 days)
<p><b>Applicants submit application to the commission:</b>            30-day period starting 180 days after Notice to Receive Applications is published. (Last timely filed application)</p>	June 30, 2004 to July 29, 2004. (30 days)
The commission issues Administrative Notice of Deficiency 45 days from receipt of last timely filed application.	July 30, 2004 to September 12, 2004. (45 days)

Applicants have three 30-day periods to respond to an Administrative Notice of Deficiency. The commission also has three 30-day periods to review responses and declare applications administratively complete.	September 13, 2004 to March 11, 2005. (180 days)
The commission holds public meetings as soon as possible following completion of administrative review and administrative declaration.	March 12, 2005 to April 25, 2005. (45 days)
The commission selects application with highest comparative merit within 270 days following receipt of last timely filed application.	July 30, 2004 to April 25, 2005. (270/45 days)
The commission completes technical review and prepares draft license 15 months from selecting the one application with highest technical merit.	April 26, 2005 to July 19, 2006. (450 days)
The commission issues Notice of Draft License and Opportunity for Hearing; assume 45 days including 30 days for final preparation of draft license, formatting, and mailout to the applicant and 15 days for publication in the <i>Texas Register</i> and a local newspaper. Applicant will also mail out the notice to adjacent landowners within 15 days.	July 20, 2006 to September 2, 2006. (45 days)
SOAH proceedings, if required, are complete and Proposal for Decision issued within one year of Notice of Draft License and Opportunity for Hearing.	September 3, 2006 to September 2, 2007. (365 days)
The commission issues license or denial within 90 days of the issuance of the SOAH Proposal for Decision.	September 3, 2007 to December 1, 2007. (90 days)

HB 1567 specifies an application selection process for a compact waste disposal facility license. Not later than January 1, 2004, the commission shall publish notice in the *Texas Register* that applications for the siting, construction, and operation of a facility or facilities for disposal of LLRW will be

accepted by the commission for a 30-day period, beginning 180 days after the date of the notice. All applications received will be evaluated by the commission for administrative completeness, and applications deemed administratively complete will be evaluated in accordance with statutory criteria for the purposes of comparing the relative merit of the applications. Based on the written evaluations and the application materials, the commission shall select the application that has the highest comparative merit. The statutory criteria are specified in the form of weighted tiers. These tiers and the application selection process are specified in Texas Health and Safety Code, §§401.233 - 401.236.

*New Staff*

There will be five new full-time equivalent positions required for the proposed licensing function in the Waste Permitting Division of the Office of Permitting, Remediation, and Registration. One senior civil/structural/operations engineer will be required to review, analyze, and testify on design and operations planning. One senior environmental engineer will be required to review, analyze, and testify on engineering design and operations pertaining to impacts on the environment. One senior hydrologist will be required to review, analyze, and testify on meteorological and surface water aspects of the application. One program specialist (quality assurance/quality control) will be required to perform a variety of major communication activities including first to edit, assimilate, and disseminate the technical reviews into an environmental assessment which provides thorough analysis of the application. One administrative technician will be required to plan and implement all administrative support for the management of the program.

The licensing process of the proposed facility is anticipated to cover five years (Fiscal Years 2004 - 2008). The Environmental Law Division would provide legal support in rulemaking, license application processing, draft licensing, and discussion with federal agencies and state advisory boards. The legal staff would represent the executive director in any contested case hearings on contested license applications. Beginning in Fiscal Year 2005, an additional 1.5 full-time equivalent positions in the Office of Legal Services will be required to implement HB 1567.

#### *Professional Services*

Professional services costs include the significant role of contractors in meeting the deadline of the proposal effectively and efficiently. Contractor estimates are based on general contract engineering costs which include a 3.5 multiplier for contractor fringe and indirect costs. These could be lowered if interagency contracts were primarily utilized. Contractors may be hired to expedite the licensing process and provide for an independent review of applications. Contracts may also include the services of a socio-economist, an archeologist, and an ecologist on a part-time, but continual basis to develop plans, evaluate, and testify on their areas of expertise. During the first year their services may be limited while guidance and application preparation is ongoing; however, during the second and third year, they may be needed for review and verification activities during site evaluation and license processing. During the fourth and fifth year, their activities may again be limited during final license preparation and hearings, as needed. Professional services costs are estimated as follows: \$200,000 in Fiscal Year 2004; \$700,000 each year in Fiscal Years 2005 and 2006; \$400,000 in Fiscal Year 2007; and \$300,000 in Fiscal Year 2008.

### *Travel*

In-state and out-of-state travel will include site reconnaissance and training. The in-state travel includes time for site reconnaissance visits during the first three years while licensing is in progress, and time for hearings during the fourth and fifth years. Some split-sampling is anticipated for verification purposes during the licensing period. The out-of-state travel reflects one trip for NRC training per year for each of the five new full-time equivalent positions. Costs for in-state and out-of-state travel are estimated to be between \$12,000 and \$22,000 for the five-year period.

### *Training*

Training will include NRC licensing-related courses and technical courses such as groundwater modeling, performance assessment, and structural engineering. The estimated \$8,000 per year cost reflects one course per year per each of the five new full-time equivalent positions.

### *Other Operating Costs*

Sampling equipment will be needed by license specialists taking samples to obtain baseline sample data. Lab costs and purchase of field safety equipment (estimated to be between \$6,500 and \$7,500 each year for Fiscal Years 2004 - 2006) and will also be necessary for the site evaluation.

As previously stated, all of the costs to the commission for licensing of the proposed site will be paid from fees, unexpended balances, and any other revenue collected and deposited into the Low-Level Radioactive Waste Fund. If only one application is received and no funding is received from the "Compact" states and appropriated to the commission to recover costs in reviewing license applications,

an applicant may expect additional fees to be charged for any activity related to the licensing or administration of the proposed rules to reimburse the commission for its costs. Commission costs are estimated to be \$594,837 in Fiscal Year 2004; \$1,178,953 in Fiscal Year 2005; \$1,210,138 in Fiscal Year 2006; \$1,932,588 in Fiscal Year 2007, which includes SOAH costs; and \$807,588 in Fiscal Year 2008.

The proposed rules also implement changes from HB 1567 and HB 1678, relating to the Radiation and Perpetual Care Fund. HB 1678 changes the name to the Radiation and Perpetual Care Account and re-establishes the account in the general revenue fund. Money and security in the Perpetual Care Account may be used only for the decontamination, decommissioning, stabilization, reclamation, maintenance, surveillance, control, storage, and disposal of radioactive material for the protection of the public health and safety and the environment. The 78th Legislature appropriated the commission any revenues and proceeds in the Perpetual Care Account for the purposes previously stated. Money and/or security for financial assurance for site closure, post closure, and corrective action activities would be deposited into and funded from the account according to rules adopted by the commission. Funds expended from the Perpetual Care Account to respond to shipping accidents involving LLRW must be reimbursed to the Perpetual Care Account by the responsible shipper or transporter according to rules adopted by the Texas Department of Health.

#### PUBLIC BENEFITS AND COSTS

Mr. Horvath also has determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from enforcement of and compliance with the proposed rules will

be compliance with state law and established procedures for the commission to accept and evaluate license applications from private entities to dispose of LLRW to ensure protection of public health and safety and the environment.

Fiscal implications are anticipated to businesses or individuals who wish to apply for a license to dispose of and manage LLRW in Texas.

Applicants for an LLRW disposal license will be limited to specific geographic areas of the state as defined by statute. The proposed rules would change the license application processing fee from \$415,000 to \$500,000 and would make the fee nonrefundable. The proposed rules would also provide that if the commission costs to process an application under Subchapter H, exceed the \$500,000 application processing fee, the commission may assess and collect additional fees from the applicant to recover the costs. If only one application is received and no funding is received from the "Compact" states and appropriated to the commission for recovery of costs in processing the license application, an applicant may expect additional fees to be charged for any activity related to the licensing or administration of the proposed rules to reimburse the commission for its costs. Commission costs are estimated to be \$594,837 in Fiscal Year 2004; \$1,178,953 in Fiscal Year 2005; \$1,210,138 in Fiscal Year 2006; \$1,932,588 in Fiscal Year 2007, which includes SOAH costs if a contested case hearing is required; and \$807,588 in Fiscal Year 2008. The applicant will also be responsible for any contested case hearing costs. SOAH's costs alone are estimated to be \$250,000; commission costs for a previous contested case hearing on an LLRW disposal license application in Fiscal Year 1998 were estimated at \$775,000.

The proposed rules would provide specific requirements for the disposal of any LLRW which must be disposed of within a reinforced concrete container and within a reinforced concrete barrier. These types of wastes must also be disposed of in such a manner that the waste can be monitored and retrieved. In addition, the proposed rules require that an application to receive, possess, and dispose of LLRW may not be considered administratively complete unless the applicant has acquired the title to and any interest in land and buildings on which the facility or facilities are to be located.

The proposed rules require that the "Compact" waste disposal facility license holder may not accept federal facility waste for disposal unless the "Compact" waste disposal facility license holder is licensed for its disposal under Texas Health and Safety Code, §401.207. A licensee may not accept federal facility waste until the licensee begins accepting "Compact" waste. Also, for the first five years after a license is issued under this chapter, the license shall limit the overall capacity of the federal facility waste disposal facility to not more than 3,000,000 cubic yards. The capacity may then be increased to a total volume of 6,000,000 cubic yards unless the commission makes an affirmative finding that increasing the capacity of the federal facility waste disposal facility would pose a significant risk to human health, public safety, or the environment. A major amendment to the LLRW facility license would be required to increase the volume capacity for federal facility waste, even in the absence of an affirmative finding by the commission. The proposed rules prohibit the commingling of compact waste and federal facility waste.

The proposed rules require the licensee to arrange for and pay the costs of management, control, stabilization, and disposal of federal facility waste and the decommissioning of the licensed federal

facility waste disposal activity. The licensee would be required to submit to the commission a written agreement by an official of the federal government stating that the federal government will assume all title and interest in land and buildings acquired for the disposal of federal facility waste, together with requisite rights of access to the land and buildings.

The legislation requires that a minimum of \$20 million in security be provided at the time the facility is decommissioned. Because it is not known when the facility would be decommissioned, the minimum required amount of security would be available for corrective action when the license is issued. A payment schedule for corrective action financial assurance will be established in the LLRW disposal license for any amounts required above the minimum requirement. The total amount of security established in the payment schedule would be based upon the amount of LLRW received at the site, long-term risks, and the need to address and prevent unplanned events. The payment schedule must be sufficient to ensure that the amount of security provided by the license holder at any time between the issuance of the license and the time at which the facility is decommissioned is sufficient to address any increase in the risk to public health and safety that accompanies an increase in the volume of waste and to meet the requirements of the commission to address unplanned events.

Prior to facility operation, financial assurance for the institutional control period and disposal site closure and stabilization must also be in place. A license holder would be allowed to use insurance to meet these requirements. Financial assurance costs for closure and post-closure activities will depend upon cost estimates to perform those activities. The costs estimates for closure and post-closure activities will not be known until the license application has been evaluated.

The proposed rules would require financial assurance requirements for liability coverage adequate to cover potential injury to any property or person. The same amount of coverage is proposed as is currently required for hazardous and nonhazardous industrial solid waste facilities. Annual premium costs are estimated to be between \$40,000 and \$70,000 for this type of coverage.

Any costs incurred by the license applicant to meet proposed or current licensing, operations, maintenance, and financial assurance requirements are expected to be recovered through fees collected by the licensee assessed for the disposal of LLRW. Fees will be assessed to waste generators in Texas and the other "Compact" party states, and may include electric utilities, hospitals, and others.

Operations, maintenance, and financial assurance costs for the federal facility will be borne by the licensee and recovered through charges to the federal government for waste disposal. Fee amounts will depend upon many variables, including the amount and type of waste disposed of at the proposed facility. This fiscal note does not include the fiscal impact of waste disposal fees to any entity, as the commission intends to address the "Compact" waste disposal fees in a future rulemaking.

Commercial LLRW generators in Texas, Maine, and Vermont, as well as federal facility waste generators throughout the United States, could potentially use an LLRW disposal facility in Texas.

Currently, LLRW must be stored on-site at the generator's facility or shipped out-of-state at considerable expense. The fiscal implications to LLRW generators cannot be quantified at this time.

An LLRW disposal facility would not be available for use by LLRW generators until some time after calendar year 2008. Waste disposal fees will be determined in a subsequent rulemaking closer to this time when the LLRW disposal facility is scheduled to open.

#### SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

No adverse economic effects are anticipated to any small or micro-businesses as a result of implementing the proposed rules because there are no known small or micro-businesses that own or operate, or are likely to own or operate, an LLRW disposal site with a \$500,000 application fee.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed these proposed rules 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 action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the action is not subject to §2001.0225 because it does not meet the definition of a “major environmental rule” as defined in the statute. “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 amendments to 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 added to radioactive material disposal facilities. The proposed rulemaking action implements legislative requirements in HB

1567, including the repeal of the restriction that an LLRW disposal facility may only be issued to a public entity specifically authorized by law for LLRW disposal. The proposed rulemaking implements procedural requirements for license application submission, review, and selection. The proposed rules also implement federal requirements to maintain consistency with NRC requirements, and updates existing rules by changing references from the Texas Natural Resource Conservation Commission to the Texas Commission on Environmental Quality.

Furthermore, the proposed rulemaking action does not meet any of the four applicability requirements listed in §2001.0225(a). Section 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 action does not exceed a standard set by federal law, an express requirement of state law, a requirement of a delegation agreement, nor does it adopt a rule solely under the general powers of the agency.

The Texas Health and Safety Code, Chapter 401, authorizes the commission to regulate the disposal of most radioactive material in Texas. Sections 401.051, 401.103, 401.104, and 401.412 authorize the commission to adopt rules for the control of sources of radiation and the licensing of the disposal of radioactive materials. In addition, the State of Texas is an “Agreement State” authorized by the NRC

to administer a radiation control program under the Atomic Energy Act of 1954, as amended (Atomic Energy Act). The proposed rules do not exceed the standards set by federal law. The proposed rulemaking implements changes in federal requirements for skin dose limits and deliberate misconduct.

The proposed rules do not exceed an express requirement of state law. The Texas Health and Safety Code, Chapter 401, establishes general requirements for the licensing and disposal of radioactive materials. The purpose of the rulemaking is to implement statutory requirements consistent with recent amendments to Texas Health and Safety Code, Chapter 401, as provided in HB 1567.

The proposed 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 requirements for the regulation of radioactive materials and is adequate to protect health and safety. Under the *Agreement Between the United States Nuclear Regulatory Commission and the State of Texas for Discontinuance of Certain Commission Regulatory Authority and Responsibility Within the State Pursuant to Section 274 of the Atomic Energy Act of 1954, as Amended*, NRC requirements must be implemented to maintain a compatible state program for protection against hazards of radiation. The proposed rules do not exceed the NRC requirements nor exceed the requirements for retaining status as an “Agreement State.”

These rules are proposed under specific authority of the Texas Health and Safety Code, Chapter 401. Sections 401.051, 401.103, 401.104, and 401.412 authorize the commission to adopt rules for the control of sources of radiation and the licensing of the disposal of radioactive materials. The commission invites public comment of the draft regulatory impact analysis determination.

#### TAKINGS IMPACT ASSESSMENT

The commission evaluated rulemaking action and performed a preliminary assessment of whether Texas Government Code, Chapter 2007 is applicable. The commission's preliminary assessment indicates that Texas Government code, Chapter 2007 does not apply to these proposed rules because the implementation of the NRC rulemakings on skin dose limits and deliberate misconduct is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under Texas Government Code, §2007.003(b)(4). The State of Texas has received authorization as an "Agreement State" from the NRC to administer a radiation control program under the Atomic Energy Act. The Atomic Energy Act requires the NRC to find that the state's program is compatible with NRC requirements for the regulation of radioactive materials and is adequate to protect of health and safety. The proposed rulemaking will provide compatibility with federal regulations relating to skin dose limits and deliberate misconduct.

Nevertheless, the commission further evaluated these proposed rules and performed a preliminary assessment of whether these proposed rules constitute a taking under Texas Government Code, Chapter 2007. The purpose of these proposed rules is to implement changes to Texas Radiation Control Act required by HB 1567, 78th Legislature, 2003 for the regulation and licensing of the disposal of LLRW,

implement federal requirements relating to skin dose limits and deliberate misconduct, and make non-substantive amendments to commission rules, such as amendments to reflect the commission's name change. The proposed rules would substantially advance this purpose by amending existing rules to conform with new statutory requirements, by implementing new federal requirements for skin dose limits and deliberate misconduct, and by reflecting the new name of the agency.

Promulgation and enforcement of these proposed rules would be neither a statutory nor a constitutional taking of private real property. The proposed rules do not affect a landowner's rights in private real property because this rulemaking action does not burden (constitutionally), nor restrict or limit, the owner's right to property and reduce its value by 25% or more beyond which would otherwise exist in the absence of the regulations. The proposed rules primarily implement changes to existing rules to reflect statutory requirements in HB 1567. In addition, the proposed rules reduce burdens on licensing by allowing private entities to submit applications for licensing of an LLRW disposal facility.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed this proposed rulemaking action and determined that the proposed rules are neither identified in, nor will they 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.

#### ANNOUNCEMENT OF HEARING

A public hearing on this proposal will be held in Austin, Texas, on September 16, 2003, at 1:30 p.m., at the commission's central office, 12100 Park 35 Circle, Building E, Room 201. The hearing will be structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. There will be no open discussion during the hearing; however, a commission staff member will be available to discuss the proposal 30 minutes prior to the hearing, and to answer questions before and after the hearing.

Persons with disabilities who have special communication or other accommodation needs, and who are planning to attend the hearing, should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

#### SUBMITTAL OF COMMENTS

Comments may be submitted to Angela Slupe, Office of Environmental Policy, Analysis, and Assessment, MC 205, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. All comments should reference Rule Log Number 2003-037-336-WS. Comments must be received by 5:00 p.m., September 22, 2003. For further information, please contact Devane Clarke of the Waste Permits Division at (512) 239-5604, or Alan Henderson of the Policy and Regulations Division at (512) 239-1510.

## **SUBCHAPTER A: GENERAL PROVISIONS**

### **§§336.1, 336.2, 336.9, 336.11**

#### **STATUTORY AUTHORITY**

The amendments and new section are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The amendments and new section are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed amendments and new section implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.1. Scope and General Provisions.**

(a) - (d) (No change.)

(e) No person may cause or allow the release of radioactive material, which is subject to the rules in this chapter, to the environment in violation of this chapter or of any rule, license, or order of the Texas [Natural Resource Conservation] Commission on Environmental Quality (commission).

(f) No person shall:

(1) (No change.)

(2) receive low-level radioactive waste from other persons for the purpose of disposal, except for a person [public entity] specifically licensed for the disposal of low-level radioactive waste;  
or

(3) (No change.)

(g) (No change.)

**§336.2. Definitions.**

The following words and terms, when used in this chapter, shall have the following meanings, or as described in Chapter 3 of this title (relating to Definitions), unless the context clearly indicates otherwise. Additional definitions used only in a certain subchapter will be found in that subchapter.

(1) - (21) (No change.)

(22) Compact - The Texas Low-Level Radioactive Waste Disposal Compact established under Texas Health and Safety Code, §403.006 and Texas Low-Level Radioactive Waste Disposal Compact Consent Act, Public Law Number 105 - 236 (1998).

(23) 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 §3.05 of the compact established under Texas Health and Safety Code, §403.006.

(24) Compact waste disposal facility - The low-level radioactive waste disposal facility licensed by the commission under Subchapter H of this chapter (relating to Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste) for the disposal of compact waste.

(25) [(22)] Constraint (dose constraint) - A value above which specified licensee actions are required.

(26) [(23)] Critical group - The group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for any applicable set of circumstances.

(27) [(24)] Curie (Ci) - See §336.4 of this title.

(28) [(25)] Declared pregnant woman - A woman who has voluntarily informed the licensee, in writing, of her pregnancy and the estimated date of conception. The declaration remains in effect until the declared pregnant woman withdraws the declaration in writing or is no longer pregnant.

(29) [(26)] Decommission - To remove (as a facility) safely from service and reduce residual radioactivity to a level that permits:

(A) release of the property for unrestricted use and termination of license; or

(B) release of the property under restricted conditions and termination of the license.

(30) [(27)] **Deep-dose equivalent ( $H_d$ ) (which applies to external whole-body exposure)** - The dose equivalent at a tissue depth of one centimeter (1,000 milligrams/square centimeter).

(31) [(28)] **Demand respirator** - An atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

(32) [(29)] **Depleted uranium** - The source material uranium in which the isotope uranium-235 is less than 0.711%, by weight, of the total uranium present. Depleted uranium does not include special nuclear material.

(33) [(30)] **Derived air concentration (DAC)** - The concentration of a given radionuclide in air which, if breathed by the "reference man" for a working year of 2,000 hours under conditions of light work (inhalation rate of 1.2 cubic meters of air/hour), results in an intake of one ALI. DAC values are given in Table I, Column 3, of §336.359, Appendix B, of this title.

(34) [(31)] **Derived air concentration-hour (DAC-hour)** - The product of the concentration of radioactive material in air (expressed as a fraction or multiple of the derived air

concentration for each radionuclide) and the time of exposure to that radionuclide, in hours. A licensee shall take 2,000 DAC-hours to represent one ALI, equivalent to a committed effective dose equivalent of five rems (0.05 sievert).

(35) [(32)] **Disposal** - With regard to low-level radioactive waste, the isolation or removal of low-level radioactive waste from mankind and mankind's environment without intent to retrieve that low-level radioactive waste later.

(36) [(33)] **Disposable respirator** - A respirator for which maintenance is not intended and that is designed to be discarded after excessive breathing resistance, sorbent exhaustion, physical damage, or end-of-service-life renders it unsuitable for use. Examples of this type of respirator are a disposable half-mask respirator or a disposable escape-only self-contained breathing apparatus (SCBA).

(37) [(34)] **Distinguishable from background** - The detectable concentration of a radionuclide is statistically different from the background concentration of that radionuclide in the vicinity of the site or, in the case of structures, in similar materials using adequate measurement technology, survey, and statistical techniques.

(38) [(35)] **Dose** - A generic term that means absorbed dose, dose equivalent, effective dose equivalent, committed dose equivalent, committed effective dose equivalent, total organ dose equivalent, or total effective dose equivalent. For purposes of the rules in this chapter, "radiation dose" is an equivalent term.

(39) [(36)] **Dose equivalent ( $H_T$ )** - The product of the absorbed dose in tissue, quality factor, and all other necessary modifying factors at the location of interest. The units of dose equivalent are the rem and sievert (Sv).

(40) [(37)] **Dose limits** - The permissible upper bounds of radiation doses established in accordance with the rules in this chapter. For purposes of the rules in this chapter, "limits" is an equivalent term.

(41) [(38)] **Dosimetry processor** - An individual or organization that processes and evaluates individual monitoring devices in order to determine the radiation dose delivered to the monitoring devices.

(42) [(39)] **Effective dose equivalent ( $H_E$ )** - The sum of the products of the dose equivalent to each organ or tissue ( $H_T$ ) and the weighting factor ( $w_T$ ) applicable to each of the body organs or tissues that are irradiated.

(43) [(40)] **Embryo/fetus** - The developing human organism from conception until the time of birth.

(44) [(41)] **Entrance or access point** - Any opening through which an individual or extremity of an individual could gain access to radiation areas or to licensed radioactive materials. This includes portals of sufficient size to permit human access, irrespective of their intended use.

(45) [(42)] **Exposure** - Being exposed to ionizing radiation or to radioactive material.

(46) [(43)] **Exposure rate** - The exposure per unit of time.

(47) [(44)] **External dose** - That portion of the dose equivalent received from any source of radiation outside the body.

(48) [(45)] **Extremity** - Hand, elbow, arm below the elbow, foot, knee, and leg below the knee. The arm above the elbow and the leg above the knee are considered part of the whole body.

(49) **Federal facility waste** - Low-level radioactive waste that is the responsibility of the federal government under the Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 United States Code, §2021b - 2021j).

(50) **Federal facility waste disposal facility** - A facility for the disposal of federal facility waste licensed under Subchapter H of this chapter.

(51) [(46)] **Filtering facepiece (dust mask)** - A negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium, not equipped with elastomeric sealing surfaces and adjustable straps.

(52) [(47)] **Fit factor** - A quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

(53) [(48)] **Fit test** - The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.

(54) [(49)] **General license** - An authorization granted by an agency under its rules which is effective without the filing of an application with that agency or the issuance of a licensing document to the particular person.

(55) [(50)] **Generally applicable environmental radiation standards** - Standards issued by the EPA under the authority of the Atomic Energy Act of 1954, as amended through October 4, 1996, that impose limits on radiation exposures or levels, or concentrations or quantities of radioactive material, in the general environment outside the boundaries of locations under the control of persons possessing or using radioactive material.

(56) [(51)] **Gray (Gy)** - See §336.3 of this title (relating to Units of Radiation Exposure and Dose).

(57) **Hazardous waste** - Hazardous waste as defined in §335.1 of this title (relating to Definitions).

(58) [(52)] **Helmet** - A rigid respiratory inlet covering that also provides head protection against impact and penetration.

(59) [(53)] **High radiation area** - An area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 0.1 rem (1 millisievert) in one hour at 30 centimeters from the radiation source or 30 centimeters from any surface that the radiation penetrates.

(60) [(54)] **Hood** - A respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

(61) **Host state** - A party state in which a compact facility is located or is being developed. The State of Texas is the host state under the Texas Low-Level Radioactive Waste Disposal Compact, §2.01, established under Texas Health and Safety Code, §403.006 (Text of Compact).

(62) [(55)] **Individual** - Any human being.

(63) [(56)] **Individual monitoring** - The assessment of:

(A) dose equivalent by the use of individual monitoring devices; or

(B) committed effective dose equivalent by bioassay or by determination of the time-weighted air concentrations to which an individual has been exposed, that is, DAC-hours; or

(C) dose equivalent by the use of survey data.

(64) [(57)] **Individual monitoring devices** - Devices designed to be worn by a single individual for the assessment of dose equivalent such as film badges, thermoluminescence dosimeters (TLDs), pocket ionization chambers, and personal ("lapel") air sampling devices.

(65) [(58)] **Inhalation class** - See "Class."

(66) [(59)] **Inspection** - An official examination and/or observation including, but not limited to, records, tests, surveys, and monitoring to determine compliance with the Texas Radiation Control Act (TRCA) and rules, orders, and license conditions of the commission.

(67) [(60)] **Internal dose** - That portion of the dose equivalent received from radioactive material taken into the body.

(68) [(61)] **Land disposal facility** - The land, buildings and structures, and equipment which are intended to be used for the disposal of low-level radioactive wastes into the subsurface of the land. For purposes of this chapter, a "geologic repository" as defined in 10 CFR §60.2 as amended

through October 27, 1988 (53 FR [FedReg] 43421) (relating to Definitions - high-level radioactive wastes in geologic repositories) is not considered a "land disposal facility."

(69) [(62)] **Lens dose equivalent (LDE)** - The external exposure of the lens of the eye and is taken as the dose equivalent at a tissue depth of 0.3 centimeter (300 mg/cm<sup>2</sup>).

(70) [(63)] **License** - See "Specific license."

(71) [(64)] **Licensed material** - Radioactive material received, possessed, used, processed, transferred, or disposed of under a license issued by the commission.

(72) [(65)] **Licensee** - Any person who holds a license issued by the commission in accordance with the Texas Health and Safety Code, Chapter 401 (Radioactive Materials and Other Sources of Radiation) [TRCA] and the rules in this chapter. For purposes of the rules in this chapter, "radioactive material licensee" is an equivalent term. Unless stated otherwise, "licensee" as used in the rules of this chapter means the holder of a "specific license."

(73) [(66)] **Licensing state** - Any state with rules equivalent to the Suggested State Regulations for Control of Radiation relating to, and having an effective program for, the regulatory control of naturally occurring or accelerator-produced radioactive material (NARM) and which has been designated as such by the Conference of Radiation Control Program Directors, Inc.

(74) [(67)] **Loose-fitting facepiece** - A respiratory inlet covering that is designed to form a partial seal with the face.

(75) [(68)] **Lost or missing licensed radioactive material** - Licensed material whose location is unknown. This definition includes material that has been shipped but has not reached its planned destination and whose location cannot be readily traced in the transportation system.

(76) [(69)] **Low-level radioactive waste** -

(A) Except as provided by subparagraph (B) of this paragraph, low-level radioactive waste means radioactive material that:

(i) is discarded or unwanted and is not exempt by a Texas Department of Health rule adopted under the Texas Health and Safety Code, §401.106;

(ii) is waste, as that term is defined by 10 CFR §61.2; and

(iii) is subject to:

(I) concentration limits established under this chapter; and

(II) disposal criteria established under this chapter.

(B) Low-level radioactive waste does not include:

(i) high-level radioactive waste defined by 10 CFR §60.2;

(ii) spent nuclear fuel as defined by 10 CFR §72.3;

(iii) transuranic waste as defined in [by paragraph (128) of] this section;

(iv) byproduct material as defined by paragraph (16)(B) of this section;

(v) naturally occurring radioactive material (NORM) waste; or

(vi) oil and gas NORM waste.

(C) When used in this section, the references to 10 CFR sections mean those CFR sections as they existed on September 1, 1999, as required by Texas Health and Safety Code, §401.005.

~~(77)~~ [(70)] **Lung class** - See "Class."

(78) [(71)] **Member of the public** - Any individual except when that individual is receiving an occupational dose.

(79) [(72)] **Minor** - An individual less than 18 years of age.

(80) **Mixed waste** - A combination of hazardous waste, as defined by Texas Health and Safety Code, Chapter 361, and low-level radioactive waste. The term includes compact waste and federal facility waste containing hazardous waste.

(81) [(73)] **Monitoring** - The measurement of radiation levels, radioactive material concentrations, surface area activities, or quantities of radioactive material and the use of the results of these measurements to evaluate potential exposures and doses. For purposes of the rules in this chapter, "radiation monitoring" and "radiation protection monitoring" are equivalent terms.

(82) [(74)] **Naturally occurring or accelerator-produced radioactive material (NARM)** - Any naturally occurring or accelerator-produced radioactive material except source material or special nuclear material.

(83) [(75)] **Naturally occurring radioactive material (NORM) waste** - Solid, liquid, or gaseous material or combination of materials, excluding source material, special nuclear material, and byproduct material, that:

(A) in its natural physical state spontaneously emits radiation;

(B) is discarded or unwanted; and

(C) is not exempt under rules of the Texas Department of Health adopted under Texas Health and Safety Code, §401.106.

(84) [(76)] **Near-surface disposal facility** - A land disposal facility in which low-level radioactive waste is disposed of in or within the upper 30 meters of the earth's surface.

(85) [(77)] **Negative pressure respirator (tight fitting)** - A respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

(86) [(78)] **Nonstochastic effect** - A health effect, the severity of which varies with the dose and for which a threshold is believed to exist. Radiation-induced cataract formation is an example of a nonstochastic effect. For purposes of the rules in this chapter, "deterministic effect" is an equivalent term.

(87) [(79)] **Occupational dose** - The dose received by an individual in the course of employment in which the individual's assigned duties involve exposure to radiation and/or to radioactive material from licensed and unlicensed sources of radiation, whether in the possession of the

licensee or other person. Occupational dose does not include dose received from background radiation, as a patient from medical practices, from voluntary participation in medical research programs, or as a member of the public.

(88) [(80)] **Oil and gas naturally occurring radioactive material (NORM) waste** - Naturally occurring radioactive material (NORM) waste that constitutes, is contained in, or has contaminated oil and gas waste as that term is defined in the Texas Natural Resources Code, §91.1011.

(89) [(81)] **On-site** - The same or geographically contiguous property that may be divided by public or private rights-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing, as opposed to going along, the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way that the property owner controls and to which the public does not have access, is also considered on-site property.

(90) **Party state** - Any state that has become a party to the compact in accordance with Article VII of the Texas Low-Level Radioactive Waste Disposal Compact, established under Texas Health and Safety Code, §403.006.

(91) **Perpetual care account** - The radiation and perpetual care account as defined in this section.

(92) [(82)] **Personnel monitoring equipment** - See "Individual monitoring devices."

(93) [(83)] **Planned special exposure** - An infrequent exposure to radiation, separate from and in addition to the annual occupational dose limits.

(94) [(84)] **Positive pressure respirator** - A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

(95) [(85)] **Powered air-purifying respirator (PAPR)** - An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

(96) [(86)] **Pressure demand respirator** - A positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

(97) [(87)] **Principal activities** - Activities authorized by the license which are essential to achieving the purpose(s) for which the license is issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

(98) [(88)] **Public dose** - The dose received by a member of the public from exposure to radiation and/or radioactive material released by a licensee, or to any other source of radiation under the control of the licensee. It does not include occupational dose or doses received from background

radiation, as a patient from medical practices, or from voluntary participation in medical research programs.

(99) [(89)] **Qualitative fit test (QLFT)** - A pass/fail test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

(100) [(90)] **Quality factor (Q)** - The modifying factor listed in Table I or II of §336.3 of this title that is used to derive dose equivalent from absorbed dose.

(101) [(91)] **Quantitative fit test (QNFT)** - An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

(102) [(92)] **Quarter (Calendar quarter)** - A period of time equal to one-fourth of the year observed by the licensee (approximately 13 consecutive weeks), providing that the beginning of the first quarter in a year coincides with the starting date of the year and that no day is omitted or duplicated in consecutive quarters.

(103) [(93)] **Rad** - See §336.3 of this title.

(104) [(94)] **Radiation** - Alpha particles, beta particles, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. For purposes of the rules in this chapter, "ionizing radiation" is an equivalent term. Radiation, as used in this

chapter, does not include non-ionizing radiation, such as radio- or microwaves or visible, infrared, or ultraviolet light.

(105) [(95)] **Radiation and Perpetual Care Account [Fund]** - An account in the general revenue fund established [A fund established in the treasury of the State of Texas] for the purposes specified [set forth] in the Texas Health and Safety Code [TRCA], §401.305.

(106) [(96)] **Radiation area** - Any area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 0.005 rem (0.05 millisievert) in one hour at 30 centimeters from the source of radiation or from any surface that the radiation penetrates.

(107) [(97)] **Radiation machine** - Any device capable of producing ionizing radiation except those devices with radioactive material as the only source of radiation.

(108) [(98)] **Radioactive material** - A naturally-occurring or artificially-produced solid, liquid, or gas that emits radiation spontaneously.

(109) [(99)] **Radioactive substance** - Includes byproduct material, radioactive material, low-level radioactive waste, source material, special nuclear material, source of radiation, and NORM waste, excluding oil and gas NORM waste.

(110) [(100)] **Radioactivity** - The disintegration of unstable atomic nuclei with the emission of radiation.

(111) [(101)] **Radiobioassay** - See "Bioassay."

(112) [(102)] **Reference man** - A hypothetical aggregation of human physical and physiological characteristics determined by international consensus. These characteristics shall be used by researchers and public health workers to standardize results of experiments and to relate biological insult to a common base. A description of "reference man" is contained in the International Commission on Radiological Protection report, ICRP Publication 23, "Report of the Task Group on Reference Man."

(113) [(103)] **Rem** - See §336.3 of this title.

(114) [(104)] **Residual radioactivity** - Radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's control. This includes radioactivity from all licensed and unlicensed sources used by the licensee, but excludes background radiation. It also includes radioactive materials remaining at the site as a result of routine or accidental releases of radioactive material at the site and previous burials at the site, even if those burials were made in accordance with the provisions of 10 CFR Part 20.

(115) [(105)] **Respiratory protection equipment** - An apparatus, such as a respirator, used to reduce an individual's intake of airborne radioactive materials. For purposes of the rules in this chapter, "respiratory protective device" is an equivalent term.

(116) [(106)] **Restricted area** - An area, access to which is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials. Restricted area does not include areas used as residential quarters, but separate rooms in a residential building shall be set apart as a restricted area.

(117) [(107)] **Roentgen (R)** - See §336.3 of this title.

(118) [(108)] **Sanitary sewerage** - A system of public sewers for carrying off waste water and refuse, but excluding sewage treatment facilities, septic tanks, and leach fields owned or operated by the licensee.

(119) [(109)] **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.

(120) [(110)] **Self-contained breathing apparatus (SCBA)** - An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

(121) [(111)] **Shallow-dose equivalent ( $H_s$ ) (which applies to the external exposure of the skin of the whole body or the skin of an extremity)** - The dose equivalent at a tissue depth of 0.007 centimeter (seven milligrams/square centimeter) [averaged over an area of one square centimeter].

(122) [(112)] **SI** - The abbreviation for the International System of Units.

(123) [(113)] **Sievert (Sv)** - See §336.3 of this title.

(124) [(114)] **Site boundary** - That line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee.

(125) [(115)] **Source material** -

(A) Uranium or thorium, or any combination thereof, in any physical or chemical form; or

(B) ores that contain, by weight, 0.05% or more of uranium, thorium, or any combination thereof. Source material does not include special nuclear material.

(126) [(116)] **Special form radioactive material** - Radioactive material which is either a single solid piece or is contained in a sealed capsule that can be opened only by destroying the capsule

and which has at least one dimension not less than five millimeters and which satisfies the test requirements of 10 CFR §71.75 as amended through September 28, 1995 (60 FR [FedReg] 50264) (Transportation of License Material).

(127) [(117)] **Special nuclear material -**

(A) Plutonium, uranium-233, uranium enriched in the isotope 233 or in the isotope 235, and any other material that the NRC, under the provisions of the Atomic Energy Act of 1954, §51, as amended through November 2, 1994 (Public Law 103 - 437), determines to be special nuclear material, but does not include source material; or

(B) any material artificially enriched by any of the foregoing, but does not include source material.

(128) [(118)] **Special nuclear material in quantities not sufficient to form a critical mass -** Uranium enriched in the isotope 235 in quantities not exceeding 350 grams of contained uranium-235; uranium-233 in quantities not exceeding 200 grams; plutonium in quantities not exceeding 200 grams; or any combination of these in accordance with the following formula: For each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified above for the same kind of special nuclear material. The sum of such ratios for all of the kinds of special nuclear material in combination shall not exceed one [1]. For example, the

following quantities in combination would not exceed the limitation: (175 grams contained U-235/350 grams) + (50 grams U-233/200 grams) + (50 grams Pu/200 grams) = 1.

(129) [(119)] **Specific license** - A licensing document issued by an agency upon an application filed under its rules. For purposes of the rules in this chapter, "radioactive material license" is an equivalent term. Unless stated otherwise, "license" as used in this chapter means a "specific license."

(130) [(120)] **State** - The State of Texas.

(131) [(121)] **Stochastic effect** - A health effect that occurs randomly and for which the probability of the effect occurring, rather than its severity, is assumed to be a linear function of dose without threshold. Hereditary effects and cancer incidence are examples of stochastic effects. For purposes of the rules in this chapter, "probabilistic effect" is an equivalent term.

(132) [(122)] **Supplied-air respirator (SAR) or airline respirator** - An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

(133) [(123)] **Survey** - An evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, and/or presence of radioactive materials or other sources of radiation. When appropriate, this evaluation includes, but is not limited

to, physical examination of the location of radioactive material and measurements or calculations of levels of radiation or concentrations or quantities of radioactive material present.

(134) [(124)] **Termination** - As applied to a license, a release by the commission of the obligations and authorizations of the licensee under the terms of the license. It does not relieve a person of duties and responsibilities imposed by law.

(135) [(125)] **Tight-fitting facepiece** - A respiratory inlet covering that forms a complete seal with the face.

(136) [(126)] **Total effective dose equivalent (TEDE)** - The sum of the deep-dose equivalent for external exposures and the committed effective dose equivalent for internal exposures.

(137) [(127)] **Total organ dose equivalent (TODE)** - The sum of the deep-dose equivalent and the committed dose equivalent to the organ receiving the highest dose as described in §336.346(a)(6) of this title (relating to Records of Individual Monitoring Results).

(138) [(128)] **Transuranic waste** - For the purposes of this chapter, wastes containing alpha emitting transuranic radionuclides with a half-life greater than five years at concentrations greater than 100 nanocuries/gram.

(139) [(129)] **Type A quantity (for packaging)** - A quantity of radioactive material, the aggregate radioactivity of which does not exceed  $A_1$  for special form radioactive material or  $A_2$  for normal form radioactive material, where  $A_1$  and  $A_2$  are given in or shall be determined by procedures in Appendix A to 10 CFR Part 71 as amended through September 28, 1995 (60 FR [FedReg] 50264) (Packaging and Transportation of Radioactive Material).

(140) [(130)] **Type B quantity (for packaging)** - A quantity of radioactive material greater than a Type A quantity.

(141) [(131)] **Unrefined and unprocessed ore** - Ore in its natural form before any processing, such as grinding, roasting, beneficiating, or refining.

(142) [(132)] **Unrestricted area** - Any area that is not a restricted area.

(143) [(133)] **User seal check (fit check)** - An action conducted by the respirator user to determine if the respirator is properly seated to the face. Examples include negative pressure check, positive pressure check, irritant smoke check, or isoamyl acetate check.

(144) [(134)] **Very high radiation area** - An area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose in excess of 500 rads (five grays) in one hour at one meter from a source of radiation or one meter from any surface that the radiation penetrates.

(145) [(135)] **Violation** - An infringement of any provision of the Texas Radiation Control Act (TRCA) [TRCA] or of any rule, order, or license condition of the commission issued under the TRCA or this chapter.

(146) [(136)] **Week** - Seven consecutive days starting on Sunday.

(147) [(137)] **Weighting factor ( $w_T$ ) for an organ or tissue (T)** - The proportion of the risk of stochastic effects resulting from irradiation of that organ or tissue to the total risk of stochastic effects when the whole body is irradiated uniformly. For calculating the effective dose equivalent, the values of  $w_T$  are:

Figure: 30 TAC §336.2(147) [Figure: 30 TAC §336.2(137)]

#### Organ Dose Weighting Factors

<u>Organ or Tissue</u>	<u><math>W_T</math></u>
Gonads	0.25
Breast	0.15
Red bone marrow	0.12
Lung	0.12
Thyroid	0.03
Bone surfaces	0.03
Remainder	0.30 <sup>1</sup>
<hr/> Whole body <hr/>	<hr/> 1.00 <sup>2</sup> <hr/>

1. The value 0.30 results from 0.06 for each of five remainder organs, excluding the skin and the lens of the eye, that receive the highest doses.

2. For the purpose of weighting the external whole body dose (for adding it to the internal dose) a single weighting factor,  $w_T = 1.0$ , has been specified. The use of other weighting factors for external exposure will be approved on a case-by-case basis until such time as specific guidance is issued.

(148) [(138)] **Whole body** - For purposes of external exposure, head, trunk including male gonads, arms above the elbow, or legs above the knee.

(149) [(139)] **Worker** - An individual engaged in activities under a license issued by the commission and controlled by a licensee, but does not include the licensee.

(150) [(140)] **Working level (WL)** - Any combination of short-lived radon daughters in one liter of air that will result in the ultimate emission of  $1.3 \times 10^5$  million electron volts (MeV) of potential alpha particle energy. The short-lived radon daughters are: for radon-222: polonium-218, lead-214, bismuth-214, and polonium-214; and for radon-220: polonium-216, lead-212, bismuth-212, and polonium-212.

(151) [(141)] **Working level month (WLM)** - An exposure to one working level for 170 hours (2,000 working hours per year divided by 12 months per year is approximately equal to 170 hours per month).

(152) [(142)] **Year** - The period of time beginning in January used to determine compliance with the provisions of the rules in this chapter. The licensee shall change the starting date of the year used to determine compliance by the licensee provided that the change is made at the beginning of the year and that no day is omitted or duplicated in consecutive years.

**§336.9. Deliberate Misconduct.**

(a) Any licensee, applicant for a license, employer of a licensee or applicant, or any contractor (including a supplier or consultant), subcontractor, employee of a contractor, or subcontractor of any licensee or applicant for a license, who knowingly provides to any licensee, applicant, contractor, or subcontractor, any components, equipment, materials, or other goods or services that relate to a licensee's or applicant's activities in this chapter, may not:

(1) engage in deliberate misconduct that causes or would have caused if not detected, a licensee or applicant to be in violation of any rule, regulation, or order, or any term, condition, or limitation of any license issued by the commission; or

(2) deliberately submit to the commission, a licensee, an applicant, or a licensee's or applicant's contractor or subcontractor, information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the commission.

(b) A person who violates subsection (a)(1) or (2) of this section may be subject to enforcement action under Texas Health and Safety Code, §401.393 and Texas Water Code, Chapter 7.

(c) For the purposes of subsection (a)(1) of this section, deliberate misconduct by a person means an intentional act or omission that the person knows:

(1) would cause a licensee or applicant to be in violation of any rule, regulation, or order; or any term, condition, or limitation of any license issued by the commission; or

(2) constitutes a violation of a requirement, procedure, instruction, contract, purchase order, or policy of a licensee, applicant, contractor, or subcontractor.

**§336.11. Memorandum of Understanding With [Between] the Texas Department of Health [and the Texas Natural Resource Conservation Commission] Regarding Radiation Control Functions.**

The Memorandum of Understanding between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions is adopted by reference in §7.118 of this title (relating to Memorandum of Understanding between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions). However, the full text of the memorandum of understanding can be found only in Texas Department of Health rule 25 TAC §289.101 (relating to Memorandum of Understanding between the Texas Department of Health and the Texas Natural Resource Conservation Commission

Regarding Radiation Control Functions). If a copy of this document is required and cannot be obtained from the Internet, a copy can be requested from the Texas [Natural Resource Conservation] Commission on Environmental Quality, Chief Clerk's Office, P.O. Box 13087, Austin, Texas 78711-3087, (512) 239-3300.

## **SUBCHAPTER B: RADIOACTIVE SUBSTANCE FEES**

### **§§336.103, 336.111, 336.113**

#### **STATUTORY AUTHORITY**

The amendments are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The amendments are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed amendments implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.103. Schedule of Fees for Subchapter H Licenses.**

(a) An application for a low-level radioactive waste disposal site license under Subchapter H of this chapter (relating to Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste) shall be accompanied by a non-refundable [an] application processing fee of \$500,000. If the commission's costs in processing an application under Subchapter H of this chapter (relating to Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste) exceed the \$500,000 application processing fee, the commission may assess and collect additional fees from the applicant to recover the costs. Recoverable costs include costs incurred by the commission for administrative review, technical review, and hearings associated with the application [\$415,000. The application fee covers the cost of processing of the application. The applicant shall pay the application fee in two equal installments. The first payment shall be made upon submission of the application, and the balance shall be paid no more than 12 months later].

(b) (No change.)

(c) A holder of a license for a low-level radioactive waste disposal site issued under Subchapter H of this chapter shall submit an annual license fee for the services received. This fee shall recover for the state the actual expenses arising from the regulatory activities associated with the license. This fee shall include reimbursement for the salary and other expenses of the resident inspectors [a resident inspector] as provided by §336.743 of this title (relating to Resident Inspector). The executive director

shall send an invoice for the amount of the costs incurred during the period September 1 through August 31 of each year. Payment shall be made within 30 days following the date of the invoice.

**§336.111. Method of Payment of Fees.**

Fee payments prescribed by this subchapter shall be made in cash or by check or money order made payable to the Texas [Natural Resource Conservation] Commission on Environmental Quality. The payments may be made by personal delivery to the Financial Administration Cashier Office, Texas [Natural Resource Conservation] Commission on Environmental Quality, in Austin, Texas, or mailed to the Texas [Natural Resource Conservation] Commission on Environmental Quality, Cashier's Office, MC 214 [181], P.O. Box 13088, Austin, Texas 78711-3088.

**§336.113. Failure to Pay Prescribed Annual Fees.**

(a) A licensee failing to make payment of the fees when due under this chapter shall be assessed penalties and interest in accordance with Chapter 12 of this title (relating to Payment of Fees).

[In any case where the executive director finds that a licensee has failed to pay a fee prescribed by this subchapter by the due date, the licensee shall be assessed a penalty of 5.0% of the amount due. If the fees are not paid within 30 days after the due date, an additional 5.0% penalty shall be imposed. An annual interest rate of 12% shall be imposed on delinquent fees beginning 60 days from the due date.]

(b) - (c) (No change.)

## **SUBCHAPTER C: GENERAL DISPOSAL REQUIREMENTS**

### **§§336.203, 336.207, 336.209, 336.211**

#### **STATUTORY AUTHORITY**

The amendments are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The amendments are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed amendments implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.203. License Required.**

No person shall dispose of radioactive material unless that person has a license from the Texas [Natural Resource Conservation] Commission on Environmental Quality, or an exemption from the Texas Department of Health [(TDH)] under Texas Health and Safety Code, §401.106(a).

**§336.207. General Requirements for Issuance of a License.**

An application may be approved if the commission determines that the requirements set forth in the applicable subchapter of this chapter and Chapter 305, Subchapter C of this title (relating to Application for Permit) have been met and that:

(1) - (4) (No change.)

**§336.209. Issuance of License.**

Upon a determination that an application meets the requirements of the Texas Health and Safety Code, Chapter 401 and the commission [agency] rules relating to radioactive [radioactive] material licensing, the commission may issue a license authorizing the proposed activity.

**§336.211. General Requirements for Radioactive Material Disposal.**

(a) - (e) (No change.)

(f) The disposal of low-level radioactive waste received from other persons is prohibited, except by a person [public entity] that is specifically licensed under Subchapter H of this chapter.

**SUBCHAPTER D: STANDARDS FOR PROTECTION AGAINST RADIATION**

**§336.305, §336.363**

**STATUTORY AUTHORITY**

The amendments are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The amendments are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed amendments implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.305. Occupational Dose Limits for Adults.**

(a) The licensee shall control the occupational dose to individual adults, except for planned special exposures under §336.310 of this title (relating to Planned Special Exposures), to the following dose limits:

(1) (No change.)

(2) the annual limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities, which are:

(A) (No change.)

(B) a shallow-dose equivalent of 50 rems (0.5 sievert) to the skin of the whole body or to the skin of any extremity.

(b) (No change.)

(c) The assigned deep-dose equivalent must be for the part of the body receiving the highest exposure. The assigned and shallow-dose equivalent must be the dose averaged over the contiguous ten square centimeters of skin for the part of the body receiving the highest exposure. The deep-dose equivalent, lens dose equivalent, and shallow-dose equivalent may be assessed from surveys or other

radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure or the results of individual monitoring are unavailable.

(d) - (f) (No change.)

**§336.363. Appendix F. Requirements for Receipt of Low-Level Radioactive Waste for Disposal at Licensed Land Disposal Facilities and Uniform Manifests.**

(a) Manifest requirements for shipments received at licensed land disposal facilities.

(1) Manifest forms required.

(A) The operator of a licensed low-level radioactive waste land disposal facility shall not receive for disposal any waste which does not have a completed manifest which reflects the information requested on applicable United States Nuclear Regulatory Commission (NRC) Forms 540 (Uniform Low-Level Radioactive Waste Manifest (Shipping Paper)) and 541 (Uniform Low-Level Radioactive Waste Manifest (Container and Waste Description)) and, if necessary, on an applicable NRC Form 542 (Uniform Low-Level Radioactive Waste Manifest (Manifest Index and Regional Compact Tabulation)), as those forms and requirements are prescribed in 10 Code of Federal Regulations (CFR) §61.80, as amended [CFR 61.80 as amended through December 27, 1982 (47 FedReg 57463)] (relating to Licensing Requirements for Land Disposal of Radioactive Waste) and 10

CFR §20.2006, as amended [20.2006 as amended through March 27, 1995 (60 FedReg 15663)]  
(relating to Standards for Protection Against Radiation). The NRC Forms 540 and 540A must be completed and must physically accompany the waste shipment received at the licensed land disposal facility. Upon agreement between the shipper and the licensed land disposal facility, NRC Forms 541 and 541A and 542 and 542A may be completed, transmitted, and stored in electronic media with the capability for producing legible, accurate, and complete records on the respective forms.

(B) (No change.)

(C) This appendix includes information requirements of the United States Department of Transportation (DOT), as codified in 49 CFR Part 172. Specific information on hazardous, medical, or other waste that is required to meet EPA [United States Environmental Protection Agency (EPA)] rules, as codified in 40 CFR Parts 259, 261, or elsewhere, is not addressed in this appendix and must be provided on the required EPA forms. However, the required EPA forms must accompany the Uniform Low-Level Radioactive Waste Manifest required by this appendix.

(2) Definitions. Terms used in this appendix have the definitions set forth as follows:

(A) (No change.)

(B) NRC Forms 540, 540A, 541, 541A, 542, and 542A - Official NRC forms referenced in this appendix, as those forms and requirements are prescribed in 10 CFR §61.80, as

amended [61.80 as amended through December 27, 1982 (47 FedReg 57463)] and 10 CFR §20.2006, as amended [20.2006 as amended through March 27, 1995 (60 FedReg 15663)]. Forms received by the licensed land disposal facility need not be the originals of these forms provided that any substitute forms are equivalent to the original documentation in respect to content, clarity, size, and location of information. Upon agreement between the shipper and the licensed land disposal facility, NRC Forms 541 (and 541A) and 542 (and 542A) may be completed, transmitted, and stored in electronic media. The electronic media must have the capability for producing legible, accurate, and complete records in the format of the uniform manifest.

(C) (No change.)

(D) Shipping paper - NRC Form 540 and, if required, NRC Form 540A, as those forms and requirements are prescribed in 10 CFR §61.80, as amended [61.80 as amended through December 27, 1982 (47 FedReg 57463) and 10 CFR 20.2006 as amended through March 27, 1995 (60 FedReg 15663)], which include the information required by DOT in 49 CFR Part 172.

(E) Uniform Low-Level Radioactive Waste Manifest or uniform manifest - The combination of NRC Forms 540, 541, and, if necessary, 542, and their respective continuation sheets (Forms 540A, 541A, and 542A) as needed, or equivalent, as those forms and requirements are prescribed in 10 CFR 61.80, as amended [through December 27, 1982 (47 FedReg 57463) and 10 CFR 20.2006 as amended through March 27, 1995 (60 FedReg 15663)].

(3) Information requirements. The uniform manifest for waste received for disposal at a licensed land disposal facility shall include all information required by instructions accompanying the forms and by 10 CFR §61.80, as amended [61.80 as amended through December 27, 1982 (47 FedReg 57463) and 10 CFR 20.2006 as amended through March 27, 1995 (60 FedReg 15663)]. This information shall include, as appropriate, general information, shipment information, disposal container and waste information, uncontainerized waste information, multi-generator disposal container information, and certifications.

(b) Control and tracking.

(1) The licensed land disposal facility operator shall acknowledge receipt of the waste within one [1] week of receipt by returning, as a minimum, a signed copy of NRC Form 540 to the shipper, as this form and requirements are prescribed in 10 CFR §61.80, as amended [61.80 as amended through December 27, 1982 (47 FedReg 57463)] and 10 CFR 20.2006 as amended through March 27, 1995 (60 FedReg 15663). The shipper to be notified is that who last possessed the waste and transferred the waste to the operator. If a discrepancy exists between materials listed on the uniform manifest and materials received, copies or electronic transfer of the affected forms must be returned indicating the discrepancy.

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

**SUBCHAPTER F: LICENSING OF ALTERNATIVE METHODS OF DISPOSAL  
OF RADIOACTIVE MATERIAL**

**§336.501**

**STATUTORY AUTHORITY**

The amendment is proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The amendment is also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed amendment implements Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.501. Scope and General Provisions.**

(a) (No change.)

(b) Except as provided by this subsection, the commission shall not authorize new or additional facilities or the expansion of existing facilities for the on-site disposal of low-level radioactive waste, except to a person [public entity] specifically authorized by law for low-level radioactive waste disposal. The commission may, on request or its own initiative, authorize, under this subchapter, on-site disposal of low-level radioactive waste on a specific basis at any facility at which low-level radioactive waste disposal operations began before September 1, 1989, if after evaluation of the specific characteristics of the waste, the disposal site, and the method of disposal, the commission finds that the continuation of the disposal activity will not constitute a significant risk to the public health and safety and to the environment.

(c) (No change.)

**SUBCHAPTER H: LICENSING REQUIREMENTS FOR NEAR-SURFACE**

**LAND DISPOSAL OF LOW-LEVEL RADIOACTIVE WASTE**

**§§336.701 - 336.705, 336.707 - 336.709, 336.711, 336.716 - 336.718, 336.720, 336.723, 336.728 -  
336.730, 336.733, 336.735 - 336.738, 336.743**

**STATUTORY AUTHORITY**

The amendments and new sections are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The amendments and new sections are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed amendments and new sections implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.701. Scope and General Provisions.**

(a) This subchapter establishes [, for near-surface land disposal of low-level radioactive waste and accelerator-produced radioactive material,] the procedures, criteria, and terms and conditions upon which the commission issues a license for the near-surface land disposal of low-level radioactive wastes and accelerator-produced radioactive material received from other persons. The rules in this subchapter apply to disposal of low-level radioactive waste and accelerator-produced radioactive material as defined in §336.2 of this title (relating to Definitions). For the purpose of this subchapter, the term “low-level radioactive waste” includes accelerator-produced radioactive material. If there is a conflict between the rules of the commission and the rules of this subchapter, the rules of this subchapter shall prevail. No person shall engage in disposal of low-level radioactive waste received from other persons except as authorized in a specific license issued under this subchapter. A licensee under this subchapter shall conduct processing of low-level radioactive waste received for disposal at the licensed site, incidental to the disposal of that waste, in accordance with provisions of the commission license which authorizes the disposal.

(b) A licensee authorized to dispose of low-level radioactive waste under the rules in this subchapter shall not accept for disposal:

(1) high-level radioactive waste as defined in 10 Code of Federal Regulations (CFR) §60.2 [60.2] as amended through October 27, 1988 (53 FR [FedReg] 43421) (Definitions - high-level radioactive wastes in geologic repositories);

(2) - (4) (No change.)

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

#### **§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) - (4) (No change.)

(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.

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

(7) [(6)] **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.

(8) [(7)] **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.

(9) (8) **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.

(10) [(9)] **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.

(11) [(10)] **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.

[(11) **Hazardous wastes** - Those wastes designated as hazardous by the EPA rules in 40 Code of Federal Regulations Part 261 as amended through July 1, 1996 (61 FedReg 34278) (Identification and Listing of Hazardous Waste).]

(12) - (21) (No change.)

**§336.703. Concepts.**

The applicant shall consider the concepts provided in 10 Code of Federal Regulations §61.7, as amended.

**§336.704. Applications for License of Compact Waste Disposal Facility.**

(a) Notwithstanding any other section in this chapter, an application for a license to receive, possess, and dispose of low-level radioactive waste from others at the compact waste disposal facility shall be subject to the application selection process in Subchapter I of this chapter (relating to Compact Waste Disposal Facility Application Selection Process). The license issued under this chapter is the license for the compact waste disposal facility. The commission may not issue more than one license for a single compact waste disposal facility. Licensing of the disposal of federal facility waste must meet the requirements of Subchapters H and J of this chapter (relating to Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste; and Federal Facility Waste Disposal Facility).

(b) The compact waste disposal facility licensed under this subchapter is the regional disposal facility established and operated under the compact established under Texas Health and Safety Code, Chapter 403, for purposes of the federal Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 United States Code, §§2021b - 2021j).

**§336.705. Content of Application.**

An application for a license to receive, possess, and dispose of low-level radioactive waste from other persons by near-surface land disposal shall consist of, but is not limited to, the information specified [set forth] in Chapter 305 of this title (relating to Consolidated Permits), §336.706 of this title (relating to General Information), §336.707 of this title (relating to Specific Technical Information), §336.708 of this title (relating to Environmental Information), §336.709 of this title (relating to Technical and Environmental Analyses), §336.710 of this title (relating to Institutional Information), and §336.711 of this title (relating to Financial Information).

**§336.707. Specific Technical Information.**

The specific technical information in the application shall include the following information needed for demonstration that the performance objectives [of this subchapter] and the applicable technical requirements of this subchapter will be met:

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

(6) a description of the types, chemical and physical forms, quantities, classification, and specifications of the radioactive material proposed to be received, possessed, processed, and disposed of at the land disposal facility. This description shall include any prior disposal containing radioactive material at the site. This description shall include performance criteria for form and packaging of the waste or radioactive material that has been previously received and will [to] be received;

(7) - (11) (No change.)

**§336.708. Environmental Information.**

(a) The application shall include site-specific environmental information (or reconnaissance-level information when appropriate) which addresses and quantifies to the extent practicable the following:

(1) a statement of need and a description of the proposed activities identifying the location of the proposed site, the character of the proposed activities, and any plans for use of the facility for purposes other than processing and disposal of waste;

(2) proposed time schedules for construction, receipt, processing, and disposal of waste at the proposed facility;

(3) area and site characteristics including ecology, geology (including geotechnical features), seismology, geochemistry, soils, topography, hydrology, air quality, natural radiation background, meteorology, climatology, historical and cultural landmarks, archaeology, demography, and current land uses;

(4) an identification of the known natural resources at the disposal site, whose exploitation could result in inadvertent intrusion into the wastes after removal of active institutional control;

(5) a flow diagram of waste processing and disposal operations, a description and accurate drawings of processing equipment, and any special handling techniques to be employed;

(6) site selection process, including considerations of the interrelationships between location of waste generators, transportation costs and means, site characteristics, and compatibility with current land uses;

(7) project alternatives, including a discussion of the alternatives considered by the applicant for processing and disposal of waste;

(8) radiological and nonradiological impacts of the proposed action, including:

(A) surface and groundwater impacts;

(B) socioeconomic impacts;

(C) short- and long-term impacts on public health and safety; and

(D) impacts resulting from irreversible or irretrievable commitments of resources;

(9) environmental effects of postulated operational and transportation accidents;

(10) a description of baseline, operational, and long-term environmental monitoring programs, including radioactive and chemical characteristics, and the plan for taking corrective measures if migration of radionuclides or chemical constituents is indicated;

(11) decommissioning and site closure and stabilization plan [plans], including those design features which are intended to facilitate disposal site closure and to eliminate the need for ongoing active maintenance after closure and an estimated date of site closure, which is to be updated as required; and

(12) a list of all governmental permits, licenses, approvals, and other entitlements obtained in connection with the proposed action.

(b) The applicant shall provide an environmental report under the requirements of 10 Code of Federal Regulations, §§51.45, 51.62, and 61.10, as amended.

**§336.709. Technical and Environmental Analyses.**

The specific technical and environmental information in the application shall also include the following analyses needed to demonstrate that the performance objectives of this subchapter, referenced in §336.723 of this title (relating to Performance Objectives), will be met:

(1) Pathways analyzed in demonstrating protection of the general population from releases of radioactivity shall include air, soil, groundwater, surface water, plant uptake, and exhumation by animals. The analyses shall clearly identify and differentiate between the roles performed by the natural disposal site characteristics and design features in isolating and segregating the wastes. The analyses shall clearly demonstrate that there is reasonable assurance that the exposures to humans from the release of radioactivity will not exceed the limits specified [set forth] in §336.724 of this title (relating to Protection of the General Population from Releases of Radioactivity). A minimum period of 1,000 years after closure or the period where peak dose occurs, whichever is longer, is required as the period of analysis to capture the peak dose from the more mobile long-lived

radionuclides and to demonstrate the relationship of site suitability to the performance objective in this section to the performance objective in §336.724 of this title.

(2) Analyses of the protection of individuals from inadvertent intrusion shall include demonstration that there is reasonable assurance that the waste classification and segregation requirements will be met and that adequate barriers to inadvertent intrusion will be provided, as required in §336.725 of this title (relating to Protection of Individuals from Inadvertent Intrusion).

(3) Analyses of the protection of individuals during operations shall include assessments of expected exposures due to routine operations and likely accidents during handling, storage, and disposal of waste. The analyses shall provide reasonable assurance that exposures will be controlled to meet the requirements of Subchapter D of this chapter (relating to Standards for Protection Against Radiation) and §336.726 of this title (relating to Protection of Individuals during Operations).

(4) Analyses of the long-term stability of the disposal site and the need for ongoing active maintenance after closure shall be based upon analyses of active natural processes such as erosion, mass wasting, slope failure, settlement of wastes and backfill, infiltration through covers over disposal units and adjacent soils, and surface drainage of the disposal site. The analyses shall provide reasonable assurance that there will not be a need for ongoing active maintenance of the disposal site following closure, as required in §336.727 of this title (relating to Stability of the Disposal Site after Closure).

**§336.711. Financial Information.**

The financial information in the application shall be sufficient to demonstrate that the financial qualifications of the applicant are adequate to carry out the activities for which the license is sought, in accordance with §336.735 of this title (relating to Applicant Qualifications and Assurances), and meet other financial assurance requirements of this subchapter, including §336.736 of this title (relating to Liability Coverage and Funding for Disposal Site Closure and Stabilization), §336.737 of this title (relating to Funding for Institutional Control), §336.738 of this title (relating to Funding for Corrective Action), and Chapter 37 of this title (relating to Financial Assurance).

**§336.716. Terms and Conditions of License.**

(a) - (b) (No change.)

(c) The licensee shall be subject to the applicable provisions of the Texas Health and Safety Code, Chapter 401, also known as the Texas Radiation Control Act (TRCA) now or hereafter in effect and to applicable rules and orders of the commission. The terms and conditions of the license are subject to amendment, revision, or modification, by reason of amendments to the TRCA or by reason of rules and orders issued in accordance with terms of the TRCA.

(d) - (g) (No change.)

(h) Each license shall be issued for an initial term of 15 [a fixed period of time to be specified in the license but in no case to exceed 20] years from the date of issuance. After the initial 15 years, the commission may renew the license for one or more terms of ten years. The authority to dispose of waste expires on the date stated in the license except as provided in §336.718(a) of this title (relating to Application for Renewal or Closure).

(i) The compact waste disposal facility license must require the license holder to indemnify the state for any liability imposed on the state under state or federal law, as required by the commission for the disposal of federal facility waste.

**§336.717. Conveyance of Waste.**

(a) The compact waste disposal facility license holder shall convey, at no cost to the state, the title to the compact waste delivered to the disposal facility for disposal at the time the waste is accepted at the site. Acceptance occurs when the acceptance criteria specified in the license have been satisfied. This section does not apply to federal facility waste accepted at a federal facility waste disposal facility.

(b) The title and all related rights and interest in compact waste conveyed under this section are the property of the commission on the state's behalf. The commission may administer the waste as property in the name of the state.

**§336.718. Application for Renewal or Closure.**

(a) Any expiration date on a license applies only to the above ground activities and to the authority to dispose of waste. Failure to renew the license shall not relieve the licensee of responsibility for completing site closure, post-closure observation, and transfer of the license to the custodial agency. An application for renewal or an application for closure under §336.719 of this title (relating to Content of Application for Closure) shall be filed at least one year [30 days] before license expiration.

(b) - (c) (No change.)

**§336.720. Post-closure Observation and Maintenance.**

(a) Following completion of closure authorized in §336.719 of this title (relating to Content of Application for Closure), the licensee shall observe, monitor, and carry out necessary maintenance and repairs at the disposal site until the site closure is complete and the license is transferred by the commission in accordance with §336.721 of this title (relating to Transfer of License to Custodial Agency). Responsibility for the disposal site shall be maintained by the licensee for five years. A shorter or longer time period for post-closure observation and maintenance may be established and approved as part of the site closure plan, based on site-specific conditions.

(b) Upon transfer of the license to the custodial agency and transfer of the financial assurance to the perpetual care account, the licensee will be released from the requirements of liability coverage

under Chapter 37, Subchapter T of this title (relating to Financial Assurance for Near-Surface Land Disposal of Low-Level Radioactive Waste).

**§336.723. Performance Objectives [General Requirement].**

Land disposal facilities shall be sited, designed, operated, closed, and controlled after closure so that reasonable assurance exists that exposures to humans are within the limits established in the performance objectives in §336.724 of this title (relating to Protection of the General Population from Releases of Radioactivity), §336.725 of this title (relating to Protection of Individuals from Inadvertent Intrusion), §336.726 of this title (relating to Protection of Individuals during Operations), and §336.727 of this title (relating to Stability of the Disposal Site after Closure).

**§336.728. Disposal Site Suitability Requirements for Near-Surface Land Disposal.**

(a) - (j) (No change.)

(k) The disposal site shall not be located where nearby facilities or activities could adversely impact the ability of the site to meet the performance objectives of this subchapter or significantly mask the environmental monitoring program. If activities involving radioactive material were previously performed on the site, the applicant shall evaluate the contribution of those activities that may impact the ability of the site to meet performance objectives.

(l) (No change.)

(m) The disposal site shall not be located in a county any part of which is located 62 miles or less from an international boundary.

(n) The disposal site shall not be located in a county in which the average annual rainfall is greater than 20 inches.

(o) The disposal site shall not be located in a county that adjoins river segment 2309, 2310, or 2311 as identified by the commission in the Texas Surface Water Quality Standards in §307.10(3) of this title (relating to Appendices A - E). These river segments are identified as follows:

(1) river segment 2309 is the Devil's River;

(2) river segment 2310 is the lower Pecos River; and

(3) river segment 2311 is the upper Pecos River.

(p) The disposal site shall not be located less than 20 miles upstream of or up-drainage from the maximum elevation of the surface of a reservoir project that:

(1) has been constructed or is under construction by the United States Bureau of Reclamation or the United States Army Corps of Engineers; or

(2) has been approved for construction by the Texas Water Development Board as part of the state water plan under Texas Water Code, Subchapter C, Chapter 16.

**§336.729. Disposal Site Design for Near-Surface Land Disposal.**

(a) - (f) (No change.)

(g) The design of a disposal facility should incorporate, to the extent practicable, safeguards against hazards resulting from local meteorological conditions, including phenomena such as hurricanes, tornados, violent storms, and susceptibility to flooding, as well as geologic phenomena such as earthquakes and earth tremors.

**§336.730. Near-Surface Land Disposal Facility Operation and Disposal Site Closure.**

(a) Wastes designated as Class A under §336.362(a) [, Appendix E] of this title (relating to Appendix E. Classification and Characteristics of Low-Level Radioactive Waste) shall be segregated from other wastes by placing the Class A wastes in disposal units which are sufficiently separated from disposal units for the other waste classes so that any interaction between Class A wastes and other wastes shall not result in the failure to meet the performance objectives specified in §336.723 of this

title (relating to Performance Objectives) [subchapter]. This segregation is not necessary for Class A wastes if they meet the stability requirements in §336.362(b)(2) of this title.

(b) Wastes designated as containerized Class A, Class B, or Class C under §336.362(a) of this title or §336.702 of this title (relating to Definitions) shall be disposed of in the following manner:

(1) within a reinforced concrete container and within a reinforced concrete barrier, or within containment structures made of materials technologically equivalent or superior to reinforced concrete to provide stability after disposal in order to meet the performance objectives set forth in §336.723 of this title;

(2) in such a manner that the waste can be monitored and retrieved; and

(3) so that the top of the waste is a minimum of five meters below the top surface of the cover or shall be disposed of with intruder barriers that are designed to protect against an inadvertent intrusion for at least 500 years.

(c) - (j) (No change.)

**§336.733. Waste Classification, Characteristics, and Labeling.**

(a) All low-level radioactive waste and mixed waste [Waste] received for disposal by the licensee shall be classified in accordance with §336.362(a), [Appendix E] of this title (relating to Appendix E. Classification and Characteristics of Low-Level Radioactive Waste), shall meet the applicable characteristics of §336.362(b) of this title, and shall be labeled in accordance with §336.362(c) of this title.

(b) (No change.)

(c) In addition to the requirements of this chapter, the licensee shall comply with the requirements of Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste) for the disposal of mixed waste. The licensee may not dispose of mixed waste unless the licensee is specifically licensed for the disposal of mixed waste under this chapter and permitted under Chapter 335 of this title.

**§336.735. Applicant Qualifications and Assurances.**

The applicant shall show that it either possesses the necessary funds or has reasonable assurance of obtaining the necessary funds, or by a combination of the two, to cover the estimated costs of conducting all licensed activities over the planned operating life of the project, including costs of construction and disposal. The applicant shall provide proof of funds sufficient to cover any annual license fee and any agency costs of processing the application that may exceed the \$500,000 application processing fee.

**§336.736. Liability Coverage and Funding for Disposal Site Closure and Stabilization.**

(a) - (b) (No change.)

(c) The licensee's financial assurance mechanism and cost estimates shall be reviewed annually by the executive director to assure that sufficient funds are available for completion of the closure plan, assuming that the work has to be performed by an independent contractor.

(d) (No change.)

(e) Before commencement of operations, the applicant shall provide financial assurance for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations of the compact waste disposal facility and/or federal facility waste disposal facility in a manner that meets the requirements of Chapter 37 of this title (relating to Financial Assurance).

(f) [(e)] Financial assurance mechanisms submitted to comply with this section shall meet the requirements specified in Chapter 37, Subchapter T of this title (relating to Financial Assurance for Near-Surface Land Disposal of Radioactive Waste).

**§336.737. Funding for Institutional Control.**

(a) The licensee shall pay into the perpetual care account [Radiation and Perpetual Care Fund] an amount determined by the executive director to be adequate to provide surveillance, monitoring, any required maintenance, and other care of the disposal site on a continuing basis during the institutional control period. Unless otherwise specified, the amount of funding provided shall be an amount necessary to provide perpetual surveillance, monitoring, any required maintenance, and other care of the disposal site and the administration of the fund by the state. The amount of funds necessary to provide perpetual care during the institutional control period shall be based upon a real annual rate of interest, above inflation, of 2% (i.e., the amount required is calculated by expressing all costs at an annual rate and multiplying the total annual cost by 50 to calculate an amount that will be self-perpetuating at a real annual interest rate of 2%).

(b) Prior to the commencement of operations [During the term of the license before the institutional control period], the licensee shall provide the total amount of required funding by means approved by the executive director, such as a combination of periodic payments into the fund and financial assurance covering the remainder of the total amount. Financial assurance mechanisms shall meet the requirements of Chapter 37, Subchapter T of this title (relating to Financial Assurance for Near-Surface Land Disposal of Low-Level Radioactive Waste).

(c) (No change.)

**§336.738. Funding for Corrective Action.**

(a) Prior to the commencement of operations, the licensee shall provide financial assurance for corrective action to address unplanned events that pose a risk to public health and safety that may occur after the decommissioning and closure of the compact waste disposal facility or federal facility waste disposal facility.

(b) The payment schedule and amount shall be determined by the executive director. The amount shall not be less than \$20 million at the time the disposal facility site is decommissioned.

(c) Financial assurance under this section shall be established and maintained in accordance with Chapter 37, Subchapter T of this title (relating to Financial Assurance for Near-Surface Land Disposal of Low-Level Radioactive Waste).

**§336.743. Resident Inspectors [Inspector].**

The commission may require at any disposal site that the licensee provide facilities for two or more resident inspectors [a resident inspector who is] employed by the commission. The licensee shall reimburse the commission for the salary and other expenses of the inspectors [inspector], as provided in Subchapter B of this chapter (relating to Radioactive Substance Fees).

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

**§336.703**

**STATUTORY AUTHORITY**

The repeal is proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The repeal is also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed repeal implements Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.703. License Required.**

**SUBCHAPTER I:**

**COMPACT WASTE DISPOSAL FACILITY APPLICATION SELECTION PROCESS**

**§§336.801, 336.803, 336.805, 336.807 - 336.809,**

**336.811, 336.813, 336.815, 336.817, 336.819, 336.821, 336.823, 336.825**

STATUTORY AUTHORITY

The new sections are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The new sections are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed new sections implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.801. Applicability.**

(a) License applications to receive, possess, and dispose of low-level radioactive waste from others at the compact waste disposal facility are subject to the application selection process set out in this subchapter. Applications for licenses under this subchapter will be processed as set forth in this subchapter in addition to any procedural requirements applicable to radioactive material licensing in this title. In the event of a conflict between the procedural requirements of this subchapter and other procedural requirements in this title, the requirements of this subchapter shall prevail. Radioactive material licenses authorizing the receipt, possession, and disposal of low-level radioactive waste at the compact waste disposal facility must meet all of the requirements provided in Subchapter H of this chapter (relating to Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste) must meet the requirements of Subchapter J of this chapter (relating to Federal Facility Waste Disposal Facility) in addition to the requirements of Subchapter H. License applications under Subchapters F and G of this chapter (relating to Licensing of Alternative Methods of Disposal of Radioactive Material, and Decommissioning Standards) are not subject to this subchapter.

(b) This subchapter addresses the application selection process for the licensing of the disposal of low-level radioactive waste at the compact waste disposal facility. Applications for other

authorizations and permits issued by the commission required by the compact waste disposal facility are not subject to the application selection process provided in this subchapter.

**§336.803. Receipt of License Applications.**

License applications subject to this to subchapter will be received by the commission for a 30-day period, beginning 180 days after the date of the *Texas Register* notice publication for receipt of applications for the siting, construction, and operation of a facility or facilities for disposal of low-level radioactive waste. The executive director shall not evaluate applications received after the 30-day application period.

**§336.805. Application Requirements.**

In addition to the application requirements provided elsewhere in this title, an application for a license subject to this subchapter must:

(1) comply with Texas Health and Safety Code, Chapter 401, the rules under this title, and any other applicable requirement in the executive director's discretion;

(2) include a nonrefundable \$500,000 application processing fee as provided in §336.103(a) of this title (relating to Schedule of Fees for Subchapter H Licenses); and

(3) provide evidence relating to the reasonableness of any technique for managing low-level radioactive waste to be practiced at the proposed disposal facility or facilities including:

(A) studies of alternate techniques of waste processing and reduction at the site of waste generation; and

(B) studies of the use of aboveground isolation facilities.

**§336.807. Administrative Review.**

(a) Not later than the 45th day after the date an application is received under this subchapter, the executive director shall issue an administrative notice of deficiency to each applicant whose application is timely submitted, but is determined by the executive director to be administratively incomplete.

(b) The executive director shall provide an applicant, for whom an administrative notice of deficiency is issued, not more than three 30-day opportunities to correct the noted deficiencies in the application. For each 30-day opportunity, the executive director will evaluate the information received in response to a notice of deficiency within 30 days. If the required information is not received from the applicant within 30 days of the date of receipt of the deficiency notice, the executive director shall return the incomplete application to the applicant.

(c) The executive director shall reject any application that, after the period for correcting deficiencies has expired, is not administratively complete.

(d) In determining if an application is administratively complete, the executive director shall consider whether the application contains sufficient information that will allow the technical review of the application, including, but not limited to:

(1) the identity and qualifications of the applicant;

(2) a description of the proposed disposal facility or facilities and disposal facility site;

(3) a description of the character of the proposed activities and the types and quantities of waste to be managed at the disposal facility or facilities;

(4) a description of the proposed schedules for construction, receipt of waste, and closure;

(5) a description of the financial assurance mechanism to be used;

(6) a description of the design features of the facility or facilities, along with a description of the methods of construction and operation of the facility or facilities;

(7) a characterization of the area and disposal facility site characteristics, including ecology, geology, soils, hydrology, natural radiation background, climatology, meteorology, demography, and current land uses;

(8) a description of the safety programs to be used at the proposed facility or facilities;

(9) a copy of the warranty deed or other conveyance showing that the right, title, and interest in the land on which the facility or facilities are proposed to be located is owned in fee by the applicant as required by Texas Health and Safety Code, §401.204;

(10) an application processing fee of \$500,000 as provided in §336.103(a) of this title (relating to Schedule of Fees for Subchapter H Licenses) and proof of additional funds sufficient to cover any further costs of processing the application as estimated by the commission; and

(11) a copy of a resolution of support of the proposed facility or facilities from the commissioners court of the county in which the facility or facilities are proposed to be located.

**§336.808. Ownership of Land and Buildings.**

(a) A license application to receive, possess, and dispose of low-level radioactive waste from others at the compact waste disposal facility may not be considered administratively complete unless the applicant has acquired the title to and any interest in land and buildings on which the facility or facilities

are to be located. Except as provided in subsection (b) of this section, the applicant must demonstrate ownership of an undivided interest in fee simple title of the land and buildings, including the surface and mineral estates, on which the facility or facilities are to be located.

(b) If an applicant is unsuccessful in acquiring undivided ownership of the mineral estate in fee simple of the land on which the facility or facilities are proposed to be located, the applicant may, to the extent permissible under federal law, request an exemption of the requirement under §336.5 of this title (relating to Exemptions). In addition to the requirements of §336.5 of this title, the applicant must demonstrate that the surface use agreement is permissible under federal law and consistent with the *Agreement Between the United States Nuclear Regulatory Commission And the State of Texas for Discontinuance of Certain Commission Regulatory Authority and Responsibility within the State Pursuant to Section 274 of the Atomic Energy Act of 1954*, as amended. It is the responsibility of the applicant to apply for and obtain the exemption in a manner that will allow the timely processing of the application under this subchapter. If the requirement of ownership of the mineral estate in fee simple title is exempted under this subsection, the applicant may enter into a surface use agreement that restricts mineral access, including slant drilling and subsurface mining, to the extent necessary to prevent intrusion into the disposal facility site. The surface use agreement shall prohibit the use of the surface in the development and access of the minerals in perpetuity by the owner of the mineral estate, heirs, and successors and shall be assigned to and be enforceable by the state or federal government upon conveyance of the property under §336.710(2) of this title (relating to Institutional Information).

(c) If an applicant cannot reach a surface use agreement and cannot otherwise obtain fee simple title to the mineral estate of the land on which the facility or facilities are proposed to be located, the applicant may petition the commission under §1.8 of this title (relating to Initiation of Proceeding) to request the attorney general to institute condemnation proceedings as provided under Texas Property Code, Chapter 21, to acquire fee simple interest in the mineral rights. The petition to request initiation of condemnation proceedings shall include a description of the communications between the applicant and the mineral estate interest owner, an appraisal of the fair market value of the mineral interest, and a demonstration by the applicant of the ability to pay for all costs in obtaining the mineral interests in condemnation proceedings, including legal fees. The applicant shall provide a copy of the petition under this subsection to the owner of the mineral interest. If the petition is granted and the commission requests the attorney general to initiate condemnation proceedings, the applicant shall pay for all costs incurred by the commission in the process of obtaining the mineral interests, whether or not the mineral interests are successfully condemned. It is the responsibility of the applicant to acquire fee simple interest in the mineral interests in a manner that will allow the timely processing of the application under this subchapter.

**§336.809. Notice of Declaration of Administrative Completeness.**

When an application under this subchapter has been declared administratively complete, notice shall be provided under §39.702 of this title (relating to Notice of Declaration of Administrative Completeness). The applicant shall pay for all costs of issuing notice under this subchapter.

**§336.811. Public Meeting.**

(a) The executive director shall conduct at least one public meeting in the county or counties where a compact waste disposal facility or federal facility waste disposal facility is proposed to be located to receive public comments on the administratively complete applications as provided in §55.253 of this title (relating to Public Comment Processing). The applicant shall pay for the costs of providing notice of the public meeting and for the costs of holding the public meeting.

(b) The applicant shall publish notice of the public meeting in accordance with §39.405(f)(1) of this title (relating to General Notice Provisions), once each week during the three weeks preceding the public meeting. The notice shall include:

(1) the applicant's name;

(2) a description of the proposed activity;

(3) the proposed location of the compact waste disposal facility;

(4) the location and availability of the application;

(5) the location, date, and time of the public meeting; and

(6) the name, address, and telephone number of the contact person for the applicant from whom interested persons may obtain further information.

(c) The chief clerk shall mail notice of the public meeting to persons listed in §39.413 of this title (relating to Mailed Notice).

**§336.813. Evaluation of Applications.**

(a) The executive director shall prepare a written evaluation of each administratively complete application in terms of the criteria established under §§336.815, 336.817, 336.819, and 336.821 of this title (relating to Tier 1 Criteria, Tier 2 Criteria, Tier 3 Criteria, and Tier 4 Criteria).

(b) The executive director may issue a request for further information to each applicant whose administratively complete application is determined by the executive director to be insufficient for the purposes of the evaluation required in this section. An applicant, for whom a request for further information is issued, may be provided two 30-day opportunities to respond to the request at the discretion of the executive director.

(c) The executive director shall use the written evaluations and application materials to evaluate each application according to the criteria established by §§336.815, 336.817, 336.819, and 336.821 of this title. The executive director shall evaluate each application for each criterion for purposes of comparing the relative merit of the application, giving:

(1) equal weight to each criterion within a tier of criteria; and

(2) the greatest weight to Tier 1 criteria, greater weight to Tier 2 criteria than to Tier 3 criteria, and the least weight to Tier 4 criteria.

(d) Not later than the 270th day after receipt of the last timely filed application, the executive director, based on the written evaluations and application materials, shall select the application that has the highest comparative merit for technical review under §336.823 of this title (relating to Technical Review). If the selected application is rejected or denied by the commission, the executive director may select the application with the next highest comparative merit and proceed with the technical review under §336.823 of this title.

**§336.815. Tier 1 Criteria.**

(a) The commission shall consider as Tier 1 criteria:

(1) the natural characteristics of the disposal facility site for a proposed disposal facility or facilities;

(2) the adequacy of the proposed facility or facilities and activities to safely isolate, shield, and contain low-level radioactive waste from mankind and mankind's environment; and

(3) the adequacy of financial assurance related to the proposed activities.

(b) Natural characteristics of the disposal facility site include:

(1) the suitability of the site for the proposed activities, including the site's:

(A) geological characteristics;

(B) topography, including features relating to erosion;

(C) surface and underground hydrology;

(D) meteorological factors; and

(E) natural hazards;

(2) the compatibility of disposal activities with any uses of land near the site that could affect the natural performance of the site or that could affect monitoring of the disposal facility or facilities and disposal facility site;

(3) the adequacy of plans for the collection of prelicense monitoring data and background monitoring plans for the disposal facility site, including analysis of the ambient

conditions of the site and established trends of the site's natural parameters, including:

(A) natural background radioactivity levels;

(B) radon gas levels;

(C) air particulate levels;

(D) soil characteristics, including chemical characteristics;

(E) surface water and groundwater characteristics; and

(F) flora and fauna at the site;

(4) the possible effects of disposal activities on flora and fauna at or near the site; and

(5) the ease of access to the site.

(c) Adequacy of the proposed disposal facility or facilities and activities includes:

(1) the capability of the proposed facility or facilities and activities to isolate, shield, and contain low-level radioactive waste in conformity with federal standards;

(2) acceptable operational safety; and

(3) acceptable long-term safety as demonstrated by analysis or study.

(d) Financial assurance criteria include:

(1) adequacy of the applicant's financial qualifications to:

(A) conduct the licensed activities as proposed, including:

(i) any required decontamination, decommissioning, reclamation, or disposal; and

(ii) control and maintenance of the disposal facility site and facility or facilities after the cessation of active operations; and

(B) address any unanticipated extraordinary events that would pose a risk to public health and safety and the environment and that may occur at the disposal facility site after decommissioning and closure of the disposal facility or facilities;

(2) the adequacy of the applicant's financial assurance in an amount and type acceptable to the commission and adequate to cover potential injury to any property or person;

(3) the adequacy of the applicant's financial security, as required by commission rules;

and

(4) the degree of certainty that the applicant will be able to maintain adequate financial security.

**§336.817. Tier 2 Criteria.**

The commission shall consider as Tier 2 criteria:

(1) the suitability of facilities at the site that are associated with proposed activities and the adequacy of their engineering and design; and

(2) the suitability of the proposed disposal facility or facilities for the chemical, radiological, and biological characteristics of the low-level radioactive waste as classified under the system established under Texas Health and Safety Code, §401.053.

**§336.819. Tier 3 Criteria.**

The commission shall consider as Tier 3 criteria the applicant's:

(1) technical qualifications to receive, store, process, and dispose of low-level radioactive waste;

(2) experience in management and disposal of low-level radioactive waste and other radioactive materials;

(3) previous operating practices in this state and elsewhere, including the practices of a parent, subsidiary, or affiliated entity of the applicant, related to radioactive materials;

(4) record of compliance with environmental statutes, rules, and licenses in this state and in any other jurisdiction, including the records of a parent or subsidiary of the applicant, subject to Texas Health and Safety Code, §401.243;

(5) training programs proposed for its employees whose duties relate to the proposed disposal facility site and activities;

(6) monitoring, recordkeeping, and reporting plans;

(7) low-level radioactive waste spill detection and cleanup plans for the proposed disposal facility site and activities;

(8) decommissioning and post-closure plans;

(9) security plans;

(10) monitoring and protection plans for workers;

(11) emergency plans;

(12) plans for background monitoring during the license period, including analysis of the ambient conditions of the disposal facility site and analysis of established trends of the disposal facility site's natural parameters, including:

(A) natural background radioactivity levels;

(B) radon gas levels;

(C) air particulate levels;

(D) soil characteristics, including chemical characteristics;

(E) surface water and groundwater characteristics; and

(F) flora and fauna at the site; and

(13) ability to adequately manage the proposed disposal facility or facilities and activities for the term of the license.

**§336.821. Tier 4 Criteria.**

The commission shall consider as tier 4 criteria:

(1) the compatibility of uses of land near the proposed disposal facility site that could be affected by the construction and operation of the disposal facility or facilities; and

(2) possible socioeconomic effects on communities in the host county of:

(A) the proposed disposal facility or facilities;

(B) the operation of the proposed disposal facility or facilities; and

(C) related transportation of low-level radioactive waste to the disposal facility or facilities.

**§336.823. Technical Review.**

Upon selection of the application that has the highest comparative merit in accordance with §336.813 of this title (relating to Evaluation of Applications), the executive director shall begin the technical review of the selected application in accordance with §281.19 of this title (relating to Technical Review). The executive director shall give priority to the review of the selected application over all other radioactive materials licensing and registration matters pending before the commission.

**§336.825. Delegation.**

The commission delegates to the executive director the authority to review and evaluate applications for radioactive materials licenses under this subchapter and to select the one application under §336.813 of this title (relating to Evaluation of Applications) for further technical review. A decision by the executive director under §336.813 of this title is not appealable to the commission until the commission makes a final decision on the selected license application.

**SUBCHAPTER J: FEDERAL FACILITY WASTE DISPOSAL FACILITY**

**§§336.901, 336.903, 336.905, 336.907, 336.909**

STATUTORY AUTHORITY

The new sections are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state. The new sections are also proposed under Texas Health and Safety Code, Chapter 401, concerning Radioactive Materials and Other Sources of Radiation (also known as the Texas Radiation Control Act); §401.011, concerning Radiation Control Agency, which authorizes the commission to regulate and license the disposal of radioactive substances; §401.051, concerning Adoption of Rules and Guidelines, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; §401.103, concerning Rules and Guidelines for Licensing and Registration, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; §401.104, concerning Licensing and Registration rules, which requires the commission to provide rules for licensing for the disposal of radioactive material; §401.201, concerning Regulation of Low-Level Radioactive Waste Disposal, which authorizes the commission to regulate the disposal of LLRW; and §401.412, concerning Commission Licensing Authority, which authorizes the commission to issue licenses for the disposal of radioactive substances.

The proposed new sections implement Texas Health and Safety Code, as amended by HB 1567, 78th Legislature, 2003, §§401.011, 401.051, 401.103, 401.104, 401.151, 401.201, and 402.412.

**§336.901. Applicability.**

This subchapter provides additional licensing requirements to the requirements of Subchapter H of this chapter (relating to Licensing Requirements for Near-Surface Land Disposal of Low-Level Radioactive Waste); and other rules of this title for the disposal of federal facility waste at a separate disposal unit at the compact waste disposal facility. Applications for the licensing of the disposal of federal facility waste shall demonstrate compliance with the provisions of this subchapter in addition to other application requirements of this title. The commission may license federal facility waste disposal only at a separate and distinct disposal unit that is operated exclusively for the disposal of federal facility waste and that is adjacent to the compact waste disposal facility.

**§336.903. Receipt of Waste.**

(a) The compact waste disposal facility license holder may not accept federal facility waste for disposal unless the compact waste disposal facility license holder is licensed for the disposal of federal facility waste under the requirements of this subchapter and other licensing requirements of this title.

(b) The licensee may not accept federal facility waste at a federal facility waste disposal facility until the licensee begins accepting compact waste at the compact waste disposal facility. “Begins accepting” means accepting compact waste at a licensed and constructed compact waste disposal facility that the executive director has approved for acceptance and disposal of low-level radioactive waste.

**§336.905. Volume Limitation.**

(a) For the first five years after a license is issued under this subchapter, the license shall limit the overall capacity of the federal facility waste disposal facility to not more than three million cubic yards. Of that amount, the total volume of low-level radioactive waste accepted at the federal facility waste disposal facility that must be disposed of in accordance with §336.730 of this title (relating to Near-Surface Land Disposal Facility Operation and Disposal Site Closure) shall be limited to not more than 300,000 cubic yards.

(b) Upon application for license amendment under §305.62 of this title (relating to Amendment) and after five years from the date of licensing of the disposal of federal facility waste under this subchapter, the capacity of the federal facility waste disposal facility may be increased by three million cubic yards for a total capacity of six million cubic yards upon a determination by the commission that increasing the capacity of the federal facility waste disposal facility would not pose a significant risk to human health, public safety, or the environment. Of the increased amount, the volume of waste that must be disposed of in accordance with §336.730 of this title may be increased by not more than 300,000 cubic yards for a total volume of 600,000 cubic yards.

**§336.907. Prohibition of Commingling of Waste.**

The commingling of compact waste and federal facility waste is prohibited. If licensed to dispose of federal facility waste, the licensee shall maintain separate waste transport, acceptance, storage, processing, and disposal of compact waste and federal facility waste.

**§336.909. Additional Responsibilities.**

If licensed to dispose of federal facility waste, the licensee shall:

(1) arrange for and pay the costs of management, control, stabilization, and disposal of federal facility waste and the decommissioning of the licensed federal facility waste disposal activity;

(2) before accepting federal facility waste, submit to the commission a written agreement, acceptable to the executive director and signed by a federal government official, stating that the federal government will assume all right, title, and interest in land and buildings acquired under §336.710 of this title (relating to Institutional Information) for the disposal of federal facility waste, together with requisite rights of access to the land and buildings;

(3) before termination of the license, formally convey to the federal government the right, title, and interest in federal facility waste located on the property conveyed;

(4) transfer federal facility waste, land, and buildings to the federal government without cost to the state or federal government, other than the administrative and legal costs incurred in making the transfer; and

(5) indemnify the state, and its officers and agents, for any liability imposed on the state under state or federal law for damages, removal, or remedial action with respect to the land, the facility, or the waste accepted, stored, or disposed of, because the transfer does not relieve a license holder of liability for any act or omission before or following the transfer. This indemnification does not relieve the license holder of providing financial assurance for decommissioning, institutional control, and after decommissioning, corrective action.