

SECTION 12 FINANCIAL QUALIFICATION AND FINANCIAL ASSURANCE

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12.0 FINANCIAL QUALIFICATION AND FINANCIAL ASSURANCE

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 30 TAC §336.735 (relating to Applicant Qualifications and Assurances) and to meet other financial assurance requirements of §336, Subchapter H including: §336.736 (relating to Liability Coverage and Funding for Disposal Site Closure and Stabilization); 336.737 (relating to Funding for Institutional Control); 30 TAC §336.738 (relating to Funding for Corrective Action); and Chapter 37 (relating to Financial Assurance).

This section demonstrates that WCS' financial qualifications are adequate to carry out the activities for which the license is sought in accordance with the applicable Texas regulations, and to meet other financial assurance requirements. WCS has invested over \$30 million in buildings, equipment, and improvements at the current facility. In addition, its owner has invested additional capital to fund other cash needs. The investments made to date, submission of a \$500,000 application fee and placement of \$5 million in cash for TCEQ license application review cost, demonstrate the strong commitment that WCS and its owner have to the current and future facilities.

12.1 Necessary Funds

The applicant shall demonstrate 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 for the following:

Funding to cover the required costs is described in the subsections below. The funding includes a combination of debt financing, equity investments, and net income. Debt and/or equity financing will be used prior to the receipt of a license to dispose of low-level radioactive waste (LLRW) and net income will provide the necessary capital after operations commence.

WCS currently operates a facility that treats, stores, and disposes of RCRA/TSCA waste and treats and stores LLRW. The existing facility has operating and administrative personnel, environmental monitoring and compliance programs, health and safety programs, insurance and financial assurance policies, and other programs in place that have been approved by cognizant regulatory authorities and that would be required of any similar facility. The historical operating costs for the existing facility provide a reasonable estimate of the fixed costs of running a facility that handles LLRW and operates a landfill.

The incremental additional costs of the federal and compact facilities will mainly be due to variable costs and costs attributable to a general increase in waste volumes. Variable costs will include labor, airspace construction costs, canister costs, equipment costs, and other similar costs. WCS also expects additional regulatory costs as allowed by HB1567.

12.1.1 *Conducting Licensed Activities*

Conducting all licensed activities over the planned operating life of the project, including costs of construction and disposal [30 TAC §336.735].

WCS plans to use debt and/or equity financing to provide for the costs of obtaining the license and for the initial construction of any additional new facilities. WCS currently has a credit agreement with Andrews County Holdings, Inc. to provide certain debt financing. WCS expects additional borrowing capacity will be available and may be acquired, if needed, during the application and construction operations. Alternatively, WCS may approach sophisticated investors willing to invest in this new business opportunity.

WCS will obtain funds to conduct licensed activities through the operation of its expanded and new facilities. WCS expects to receive a license to dispose of both Compact and Federal LLRW. The Compact waste price will be based on the costs of the operations, which will allow WCS to recover all of its costs. As a result, it is not expected that WCS would lose money operating the Compact and Federal LLRW facilities. If the Compact waste were the only waste accepted by the facility, the costs of the Compact waste would be rather high due to the smaller volumes and relatively high fixed operating costs. The inclusion of Federal LLRW will increase waste volumes and allow reasonable Compact prices and a reasonable return to WCS.

Detailed pro-forma financial information regarding the development and operations of the LLRW disposal facility has been provided as a confidential submission under separate cover.

12.1.2 *Annual License Fees and Agency Costs*

Paying annual license fees and any agency costs of processing the application that may exceed the \$500,000 application processing fee [30 TAC §336.735].

Annual license fees will be included in the operating costs of the facility as discussed in Section 12.1.1. WCS has placed \$5 million in a cash account to provide for any agency costs of processing this license application that may exceed the initial \$500,000 application processing fee.

12.1.3 *Providing Insurance*

Providing sufficient insurance to cover potential injury to any property or person, including potential injury from risks relating to transportation. [H&SC §401.112(a)(9)] & [30 TAC §336.706(a)(5)]

WCS will provide an insurance policy for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations of our LLRW facility in the amount of \$5 million per occurrence and \$10 million in the aggregate. This is higher than the required amounts of at least \$4 million per occurrence and \$8 million in the aggregate. WCS currently has a similar insurance policy for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations of our RCRA facility in the amount of \$5 million per occurrence and \$10 million in the aggregate.

WCS will provide a separate Certificate of Insurance per 30 TAC §37.631 or 30 TAC §37.641 for each facility specifying the coverage that is for each specific facility. The LLRW facility will

have separate and distinct coverages from the RCRA facility for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations.

The new LLRW policy will have terms similar to our existing RCRA insurance policy. The existing policy does not have exclusions for damages caused by low-level radioactive waste. LLRW is defined in the insurance policy as material that is acceptable under WCS's current radiological possession license (#L04971). We anticipate the new insurance policy will define LLRW as material that is acceptable under the anticipated LLRW disposal license.

WCS also has general liability, property, auto, and workers compensation insurance that is placed with reputable insurance companies. The amounts and types of insurance WCS has are considered reasonable based on their industry, size of their company, and periodic reviews of their policies by their insurance providers.

Transportation providers are also required by the Department of Transportation to have \$5 million liability insurance coverage when transporting hazardous or radioactive waste. The transportation company's insurance would be over and above any insurance provided by WCS and would be paid for by the transportation company or the generator of the waste.

12.1.4 Providing Financial Assurances

Providing financial assurance for:

(1) Disposal site closure and stabilization including decontamination and dismantlement of land disposal facility structures, disposal of any radioactive material remaining at the site at closure, and closure and stabilization of the disposal site so that, following transfer of the disposal site to the custodial agency, the need for ongoing active maintenance is eliminated to the extent practicable and only minor custodial care, surveillance, and monitoring are required. Applicant shall base financial assurance for this section on cost estimates provided in Section 6.1.5 of this application. [30 TAC §336.736(a)]

(2) 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 30 TAC §37.9059 (relating to Financial Assurance Requirements for Liability);

(3) Post closure observation and maintenance based on the cost estimate submitted in Section 7.1 (for facilities accepting mixed waste, or non-mixed waste, as appropriate)

(4) Institutional control using the perpetual care account, and based on the cost estimate submitted in Section 7.2.3 of this application. [30 TAC §336.737(b)]

(5) 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, based on cost estimates submitted in Section 7.2.3 of this application

Closure – WCS intends to use an irrevocable standby letter of credit worded as provided in 30 TAC §37.331, except as modified as provided in 30 TAC §37.9050. We have provided an example of the expected wording of the cover letter and a draft form of the irrevocable standby

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letter of credit as Appendices 12.1.4-1 and 12.1.4-2. The closure costs and related calculations are described in Appendix 6.1.5-2.

Post Closure – WCS intends to use an irrevocable standby letter of credit worded as provided in 30 TAC §37.331, except as modified as provided in 30 TAC §37.9050. We have provided an example of the expected wording of the cover letter and a draft form of the irrevocable standby letter of credit as Appendices 12.1.4-1 and 12.1.4-2. The post closure cost estimate is included in Section 7.1.2. The post closure plan that supports the estimate is described in Appendix 7.1.1 and the related detail cost estimate calculations (on an annual basis) are in Appendix 7.1.3.

WCS has estimated the annual costs for post-closure activities for the anticipated 30-year period for the FWF-CDU and FWF-NCDU but only five years for the CWF. WCS has also determined the cumulative total over that period without accounting for any time value of money. The estimated 30-year amount is stated in Section 7.1.3, is further discussed in “Summary” below, and summarized in Table 12.1.4-2.

The actual funding level required for the Post-Closure Fund will be addressed during the months leading up to the expected first waste receipt and reviewed annually thereafter to ensure the fund is maintained at adequate levels.

Bodily Injury – WCS will provide an insurance policy for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations of our LLRW facility in the amount of \$5 million per occurrence and \$10 million in the aggregate. This is higher than the required amounts of at least \$4 million per occurrence and \$8 million in the aggregate. WCS currently has a similar insurance policy for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations of our RCRA facility in the amount of \$5 million per occurrence and \$10 million in the aggregate.

WCS will provide a separate Certificate of Insurance per 30 TAC §37.631 or 30 TAC §37.641 for each facility specifying the coverage that is for each specific facility. The LLRW facility will have separate and distinct coverages from the RCRA facility for bodily injury and property damage to third parties caused by sudden and non-sudden accidental occurrences arising from operations.

The new LLRW policy will have terms similar to our existing RCRA insurance policy. The existing policy does not have exclusions for damages caused by low-level radioactive waste. LLRW is defined in the insurance policy as material that is acceptable under WCS’s current radiological possession license (#L04971). We anticipate the new insurance policy will define LLRW as material that is acceptable under the anticipated LLRW disposal license.

WCS also has general liability, property, auto, and workers compensation insurance that is placed with reputable insurance companies. The amounts and types of insurance WCS has are considered reasonable based on their industry, size of their company, and periodic reviews of their policies by their insurance providers.

Transportation providers are also required by the Department of Transportation to have \$5 million liability insurance coverage when transporting hazardous or radioactive waste. The transportation company’s insurance would be over and above any insurance provided by WCS and would be paid for by the transportation company or the generator of the waste.

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Institutional Control – WCS intends to use an irrevocable standby letter of credit worded as provided in 30 TAC §37.331, except as modified as provided in 30 TAC §37.9050. We have provided an example of the expected wording of the cover letter and a draft form of the irrevocable standby letter of credit as Appendices 12.1.4-1 and 12.1.4-2. The institutional control cost estimate is included in Section 7.2.2. The institutional control plan that supports the estimate is described in Appendix 7.2.2 and the related detail cost estimate calculations (on an annual basis) are in Appendix 7.2.3.

Rule §336.737 states, “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%).” Despite this regulatory provision, communications from TCEQ Staff indicate that the TCEQ lacks the legal authority actually to implement this rule. Therefore, in response to TCEQ Staff comments and directives and in contrast to the regulatory provision, WCS has determined the value of financial assurances to be provided to cover expected institutional control costs as 100 years of institutional control at the constant estimated annual cost, expressed in 2007 dollars. This amount will be the initial amount to be provided 60-days prior to receipt of waste. This amount is discussed in “Summary” below, and summarized in Table 12.1.4-2.

The financial assurance mechanism for Institutional Control will be replaced over time by cash deposited in the perpetual care account as enabled in the legislation. The perpetual care account will be funded from operations and will grow over time. These costs will be provided through the normal operations of the facilities.

The actual funding level required for Institutional Control will be addressed during the months leading up to the expected first waste receipt and reviewed annually thereafter to ensure the fund is maintained at adequate levels.

Corrective Action – WCS intends to use an irrevocable standby letter of credit worded as provided in 30 TAC §37.331, except as modified as provided in 30 TAC §37.9050. We have provided an example of the expected wording of the cover letter and a draft form of the irrevocable standby letter of credit as Appendices 12.1.4-1 and 12.1.4-2. The corrective action cost estimate is included in Section 7.3.3. The corrective action plan that supports the estimate is described in Appendix 7.3.2 and the related detail cost estimate calculations (total costs for the corrective action) are in Appendix 7.3.3.

Corrective action funds are to be made available to address unplanned events that pose a risk to public health and safety that may occur after the decommissioning and closure of the disposal facilities will be provided through a perpetual care account.

The requirement stated in 30 TAC §336.738(b) is that the amount “shall not be less than \$20 million at the time the disposal facility site is decommissioned.” However, we understand TCEQ will require that WCS provide financial assurance for the full \$20 million amount 60 days prior to the initial receipt of waste.

Following the approach described in Section 7 of Appendix 7.3.2, WCS has identified the hypothetical release scenario that results in the highest cost corrective action, disregarding any application of the “as-low-as-reasonable-achievable” (ALARA) principle. The costs of the

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hypothetical highest cost corrective action are summarized in Appendix 7.3.3 and its details are presented in Attachment A to Appendix 7.3.3. The cost of this corrective action is estimated to be about \$22.0 million.

Given the design of the disposal facilities involving defense in depth and numerous redundant protective features, rigorous analyses reviewed and accepted by TCEQ to justify the design, geology and environmental characteristics of the landfill area, aggressive regulatory oversight, and limitations that would be imposed by the ALARA principle, the highest cost corrective action is highly unlikely ever to be selected and implemented. Nevertheless, WCS proposes that it provide the financial assurances for postulated corrective actions totaling \$22.0 million within 60 days prior to the initial receipt of waste as further discussed in “Summary” below and summarized in Table 12.1.4-2.

The actual funding level required for corrective action will be addressed during the months leading up to the expected first waste receipt and reviewed annually thereafter to ensure the fund is maintained at adequate levels.

Summary – The financial assurance required to protect the State from potential liability varies over the life of the facility. In the first year of operations the potential liability is significantly less than in the last year because of the significantly smaller volume of waste present in the facility and the correspondingly smaller footprint of the facility. This is true for closure, unplanned closure, post-closure, institutional control, and corrective action costs. For each of these, smaller inventories of waste disposed of within the correspondingly smaller facilities require less resource to accomplish the activities involved in each phase.

WCS has projected the growth of the estimated costs with volume of waste actually disposed of over the planned life of the proposed facilities. Appendix 12.1.4 explains the methodology and presents the projections. WCS has estimated the growth of financial assurance applicable following initiation of disposal operations at the proposed facility. Table 12.1.4-1 presents the major assumptions used to develop the growth of estimated liabilities:

Table 12.1.4-1. Growth of Financial Assurances Over Time

Potential Liability	Basis for Estimating Growth Over Time
Post Closure	Fixed and variable cost components identified in Table A-1 of Appendix 12.1.4-3; Fixed do not vary with volume of waste disposed of to-date, Variable costs vary linearly with volume of waste disposed of to-date ^{1 & 2} .
Institutional Control	Fixed and variable cost components identified in Table A-2 of Appendix 12.1.4-3; Fixed do not vary with volume of waste disposed of to-date, Variable costs vary linearly with volume of waste disposed of to-date ^{1 & 2} .

¹ Fixed costs include general support and meteorological data collection & interpretation.

² Variable costs include walkover; sample collection & preparation; sample analysis interpretation; sample analysis at off-site lab; leachate monitoring, pumping, and treatment; infiltration data collection and interpretation; annual report preparation; land survey; settlement monitor survey; maintenance; and custodial agency oversight.

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Table 12.1.4-2 summarizes the growth of financial assurances over time. WCS has based its currently proposed financial assurances for post closure and institutional control on the current value of costs estimated to be incurred over the first five years of facility operations. The initial financial assurance obligations for post-closure and institutional control activities without discounting is estimated to be \$30.6 million.

Table 12.1.4-2. Growth of Financial Assurances by Activity Over Time

Activity	Financial Assurance Need by Year of Postulated Unplanned Closure (in millions of dollars)						
	1	6	11	16	21	26	31
Post Closure	\$9.9	\$14.4	\$18.9	\$23.3	\$28.1	\$33.0	\$37.5
Institutional Control	\$20.7	\$28.4	\$35.9	\$43.3	\$51.3	\$59.7	\$67.2
TOTAL	\$30.6	\$42.8	\$54.7	\$66.6	\$79.4	\$92.7	\$104.7

Thus, WCS proposes to provide initial financial assurances as stated under the column headed “1” in Table 12.1.4-2. In subsequent years as the amount of waste disposed of increases and the corresponding disposal facility increases in size, WCS proposes to negotiate financial assurances appropriate to the potential liabilities that exist at those times, as shown conceptually and approximately in Table 12.1.4-2 and elaborated in Appendix 12.1.4-3.

12.2 Describe Sufficient Insurance Coverage

The applicant shall describe how the proposed insurance to be obtained by the applicant is sufficient to cover potential injury to any property or person, including potential injury from risks relating to transportation. [H&SC §401.112(a)(9)] & [30 TAC §336.706(a)(5)]

While the insurance proposed by WCS is sufficient to cover any potential injury that might occur, the risk of potential injury to property or persons is deemed to be low. The planned LLRW disposal area would be within the current RCRA/TSCA permitted area, which is surrounded by approximately 14,000 acres owned by WCS. The landfill area is geologically sound (see Section 2.1) and the facility is not near a large population or recreational center. The permitted area is fenced and has security guards on site 24 hours a day, seven days a week. All employees are trained and qualified for their jobs and wear picture ID cards that allow access to the facility. Prior to entry, visitors are required to sign in with security and wear a visitor badge while on the premises. Badges help distinguish between employees and authorized visitors. Employees will typically watch visitors to ensure they do not engage in unsafe practices.

Transportation contractors having significant federal- and state-required insurance coverage limits would transport all waste in Department of Transportation approved canisters, which are designed to limit potential injury.

As noted, in addition to the natural safeguards in place to limit potential injury or property damage, WCS also has insurance policies to cover potential risk. The policies are sufficient to cover the most-likely monetary damages that may arise.

12.3 Mechanisms for Providing Financial Assurances

The applicant shall describe the financial assurance mechanisms to be obtained by the applicant to address the obligations identified in 12.1.4.

WCS intends to use an irrevocable standby letter of credit worded as provided in 30 TAC §37.331, except as modified as provided in 30 TAC §37.9050. We have provided an example of the expected wording of the cover letter and a draft form of the irrevocable standby letter of credit in Appendices 12.1.4-1 and 12.1.4-2.

The proposed irrevocable standby letter of credit will be a standalone mechanism for the LLRW facilities, as the current operations will continue to use Corporate Guarantees as their financial assurance mechanism.

WCS expects the cost of the irrevocable standby letter of credit to be between 1.5% and 2.0% of the amount of the letter of credit. The letter of credit would most likely be placed by Valhi, Inc. with a third-party bank on behalf of WCS. The letter of credit fee will be paid annually until another mechanism is provided to cover WCS's financial assurance mechanisms

Changes in the financial assurance mechanism markets may cause WCS to evaluate the use of other allowable financial assurance mechanisms prior to placement of the financial assurance mechanism with the TCEQ.

12.4 Calculating Estimated Costs

The applicant shall provide the information used to calculate the estimated costs for each of the items in 12.1.1 - 12.1.4.

The LLRW facility costs are based on current operations, but adjusted for information received from our licensing team, current operations management, and outside engineering and consulting resources.

Operating Costs – WCS currently operates a RCRA/TSCA disposal facility and a licensed radioactive waste storage and processing facility, and this facility routinely receives and handles LLRW. WCS expects the operating costs to increase from current levels in order to provide a dedicated landfill team for the Federal facility and a dedicated landfill team for the Compact facility. WCS also expects that the addition of these facilities will increase the general business volume of WCS. The increased volume will increase fixed and labor based operating costs.

Variable operating costs include the airspace costs for all classes of LLRW and canister costs for Class B and C LLRW. These costs are directly dependent on the volume of waste accepted by the facilities and the class of the waste. Variable costs are established for the Confidential attachments of the LA.

Annual License Fees – Based on the fiscal notes submitted with HB1567, WCS expects that the initial application fees, agency costs to review and approve the license application and other agency costs prior to issuance of the license will be approximately \$5 million. Annual costs for

regulatory review and other costs once operations have commenced are estimated to be approximately \$500,000 per year.

Insurance Coverage – The cost of insurance to be provided is included in the operating costs.

Financial Assurance – The cost of financial assurance to be provided is included in the operating costs.

Detailed pro-forma financial information regarding the development and operations of the LLRW disposal facility has been provided as a confidential submission under separate cover.

12.5 Financial Information

The applicant shall provide the financial information described in 30 TAC §305.50(a)(4)(D)(ii)-(vii) to demonstrate the financial capacity to satisfy the requirements of 12.1.

Financial statements prepared in accordance with accounting principles generally accepted in the United States have been provided as a confidential submission under separate cover.

Development and Operating Cost information has been provided as a confidential submission under separate cover.