DRAFT OMB SUPPORTING STATEMENT FOR 10 CFR PART 61 LOW-LEVEL RADIOACTIVE WASTE DISPOSAL PROPOSED RULE (3150-0135, 3150-0164, and 3150-0166)

Revision

Description of the Information Collection

The Commission's licensing requirements for the disposal of commercial low-level radioactive waste (LLRW) in near-surface disposal facilities can be found in Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste." The NRC adopted 10 CFR Part 61 in 1982 (47 FR 57446). These regulations apply to any near-surface LLRW disposal facility licensed after January 27, 1983. Subpart C, "Performance Objectives," of the current 10 CFR Part 61 sets forth standards for:

- 1) 10 CFR 61.41, "Protection of the general population from releases of radioactivity,"
- 2) 10 CFR 61.42, "Protection of inadvertent intruders,"
- 3) 10 CFR 61.43, "Protection of individuals during operations," and
- 4) 10 CFR 61.44, "Stability of the disposal site after closure."

For the Commission to grant a license, the NRC must conclude that there is reasonable assurance that the license applicants will meet the performance objectives of Subpart C of 10 CFR Part 61. To demonstrate that they will meet these performance objectives, 10 CFR Part 61 license applicants need to prepare an analysis of exposure pathways leading to potential future radiological doses to the general population. License applicants must also demonstrate that potential inadvertent intruders into the disposal facility, who might occupy the site at any time, after institutional controls over the disposal site are removed, will be protected. Under the current regulations, protection of inadvertent intruders is demonstrated by compliance with the LLRW classification and segregation requirements in 10 CFR 61.55, "Waste classification," and by providing adequate barriers to inadvertent intrusion.

In the early 1980s, the NRC developed the 10 CFR Part 61 regulatory bases based on a survey of LLRW generators. The NRC used this survey to develop assumptions regarding the types of LLRW likely to go into a commercial disposal facility. The results of this survey ultimately formed the regulatory basis for the source terms used in the analysis to define the allowable isotopic concentration limits in the LLRW classification Tables 1 and 2 of 10 CFR 61.55, which established three classes of LLRW (Class A, Class B, and Class C). Low-level radioactive waste streams generated by the U.S. Department of Energy, including large quantities of depleted uranium, LLRW streams from commercial uranium enrichment facilities, and blended LLRW (which may result in large quantities of material near the upper bounds of a LLRW classification) were not considered. If LLRW differs significantly in quantity and concentration from what was considered in the original 10 CFR Part 61 regulatory basis, then it might be possible to dispose of a LLRW stream that would meet the disposal requirements in Tables 1 and 2 of 10 CFR 61.55 and the performance objectives of 10 CFR 61.42, but would result in an inadvertent intruder dose that exceeds the dose limit used to develop the LLRW classification tables (i.e., 5 millisieverts per year [mSv/yr] [500 millirem per year (mrem/yr)]).

This proposed rule would require current and future LLRW disposal facility licensees and

applicants to prepare new and updated site-specific technical analyses. The purpose of the site-specific technical analyses would be to ensure that LLRW streams that are significantly different from those considered in the current 10 CFR Part 61 regulatory basis can be disposed of safely and meet the 10 CFR Part 61, Subpart C, performance objectives. The site-specific technical analyses would include:

- 1. The newly required compliance period and protective assurance period analyses that include a revised "performance assessment" and a newly required intruder assessment (using a newly defined compliance period of within 1,000 years and protective assurance period of 10,000 years). A new analysis is needed to demonstrate defense-in-depth protection, as required by proposed 10 CFR 61.13(f). A performance assessment is needed to demonstrate the protection of the general population from releases of radioactivity, as required by proposed 10 CFR 61.41; an intruder assessment is needed to demonstrate the protection of inadvertent intruders, as required by proposed 10 CFR 61.42; and, the proposed revision to 10 CFR 61.44 will specify that stability of the disposal site must be demonstrated for the compliance and protective assurance periods.
- 2. The newly required performance period analyses (for analysis timeframe greater than 10,000 years) to evaluate how the disposal system may mitigate the risk from the disposal of long-lived LLRW. This analysis is only conducted by those licensees proposing to dispose of LLRW streams containing radionuclides with average concentrations exceeding values listed in proposed Table A of 10 CFR 61.13(e), or if necessitated by site-specific conditions.

The changes will primarily affect existing and new LLRW licensees, who must conduct the new and updated site-specific technical analyses as part of their license amendments or applications. There are four existing LLRW licensees, licensed in four different Agreement States. If any of these licensees choose to make changes from the LLRW stream identified on their initial application, they must submit an amendment pursuant to 10 CFR 61.26, including the compliance period and protective assurance period analyses, as specified in 10 CFR 61.41, 10 CFR 61.42, 10 CFR 61.44, and 10 CFR 61.13(f), and the performance period analyses, as specified in 10 CFR 61.13(e), for radionuclides with average concentrations exceeding values listed in proposed Table A of 10 CFR 61.13(e), or if necessitated by site-specific conditions. The NRC also proposes to revise 10 CFR 61.58 to specify the minimum content of the waste acceptance criteria (WAC) and require disposal facility licensees to develop approaches for generators to characterize and certify that such LLRW meets the acceptance criteria for demonstrating compliance with the site-specific WAC. Proposed 10 CFR 61.58 would also require licensees to annually review their LLRW acceptance plan and to comply with 10 CFR 61.20 when modifying their approved WAC. Additionally, the new regulatory language would indicate that the NRC would incorporate, where consistent with State and Federal law, the WAC into existing licenses. The NRC estimates that all four existing licensees will choose to make changes to their LLRW streams that will require them to submit a license amendment, but that the burdens will not be incurred for four years after the effective date of the final rule. This is based on the assumption that the NRC will publish the final rule in 2016 and the Agreement States will take 3 years to develop their conforming regulations and to adopt the final 10 CFR Part 61.

Any new license applicants would incur additional burdens to conduct the specified compliance period analyses, protective assurance period analyses, and the performance period analyses. No applications are also expected during the three-year clearance period.

All licensees will be impacted by the proposed changes to 10 CFR Part 61 at the time of license amendment for closure, as specified in 10 CFR 61.28, "Contents of application for closure," when they must submit updated compliance period analyses, protective assurance period analyses and the performance period analyses, as specified in the revised 10 CFR 61.41, 61.42, 61.44, 61.13(e), and 61.13(f), using the details of the final closure plan and LLRW inventory.

The proposed rule would also require LLRW disposal licensees or license applicants to develop criteria for the acceptability of LLRW for disposal. These amendments maintain the existing LLRW classification system, but permit licensees or license applicants to account for facility design, disposal practices, and site characteristics to determine LLRW acceptable for disposal. Under the proposed 10 CFR 61.58(f), licensees are also required to conduct an annual review of the LLRW acceptance plan to determine if they need to be updated, to ensure that the LLRW disposal facility continues to comply with the Subpart C performance objectives. In addition, under the proposed 10 CFR 61.80(m), the licensees are required to maintain LLRW acceptance records for three years after the record is made.

Conforming changes have been made to the rule language in 10 CFR Part 20, "Standards for the Protection Against Radiation," but no information collections were affected.

The NRC is also proposing to make changes to the following forms to conform to proposed requirements for LLRW acceptance:

- NRC Form 540, "Uniform Low-Level Radioactive Waste Manifest Shipping Paper;"
- NRC Form 540A, "Uniform Low-Level Radioactive Waste Manifest Shipping Paper, Continuation; "NRC Form 541, "Uniform Low-Level Radioactive Waste Manifest Container and Waste Description;" and
- NRC Form 541A, "Uniform Low-Level Radioactive Waste Manifest Container and Waste Description, Continuation."

The changes to these forms are not estimated to increase or decrease the burden for form completion, but simply to provide a response option for licensees using waste acceptance criteria (as opposed to a waste classification of A, B, or C) to indicate that the LLRW being shipped to a disposal facility conforms to the facility waste acceptance criteria.

A. <u>Justification</u>

1. Need for and Practical Utility of the Information Collection

The proposed amendments would revise 10 CFR Part 61 to require LLRW disposal facilities to conduct site-specific technical analyses to demonstrate compliance with the performance objectives in Subpart C, which would ensure that LLRW streams that are significantly different from those considered during the development of the current regulations can be disposed of safely and meet the performance objectives for land disposal of LLRW. These amendments would also increase the use of site-specific information to ensure public health and safety continues to be protected.

Section 61.12 of 10 CFR Part 61 specifies the technical information needed to demonstrate that the performance objectives of subpart C of 10 CFR Part 61 have been met. The proposed rule adds "geochemical" and "geomorphological" features to the list of site characteristics that must be described. Burden for

these additional features is included in the estimate for 10 CFR 61.13(a), performance assessment. In addition, the proposed rule adds "the criteria for acceptance of waste for disposal" to the description of radioactive material that must be provided. Burden for this is included in the burden estimate for 10 CFR 61.58, "LLRW Acceptance Plan."

<u>Section 61.13</u> of 10 CFR Part 61 specifies additional technical analyses that must be submitted in an application for a 10 CFR Part 61 disposal facility license, which is needed to demonstrate that the performance objectives of Subpart C of 10 CFR Part 61 would be met:

10 CFR 61.13(a) requires a performance assessment to demonstrate compliance with the proposed dose limit in 10 CFR 61.41(a) during the compliance period and a dose goal in 10 CFR 61.41(b) during the protective assurance period. The performance assessment would be required to consider features, events, and processes which can influence the ability of the disposal facility to meet the performance objectives. evaluate environmental pathways, account for uncertainty, consider alternative conceptual models, and identify and differentiate the roles performed by site characteristics and design features of the disposal facility. Further, the proposed revisions to 10 CFR 61.13(a) would require that the performance assessment used to demonstrate compliance with a new 10 CFR 61.41(b) during the protective assurance period reflect new features, events, and processes different from the compliance period only if scientific information compelling such changes is available. 10 CFR 61.13(b) requires an intruder assessment to demonstrate the protection of inadvertent intruders. The intruder assessment would be required to assume an intruder occupies the site and engages in normal activities that are consistent with activities in and around the site at the time of closure, identify adequate intruder barriers and provide a basis for the time period that they are effective, and account for uncertainty and variability.

10 CFR 61.13(d) currently requires an applicant to prepare analyses that demonstrate long-term stability of the site and the need for ongoing active maintenance after closure. However, the analyses are not currently required to provide reasonable assurance that long-term stability of the disposal site can be ensured. The NRC is proposing to require that the analyses also provide reasonable assurance that long-term stability of the disposal site can be ensured. Burden for this change is included in the burden estimate for 10 CFR 61.13 (f).

10 CFR 61.13(e) is a new paragraph. Regulations in 10 CFR Part 61 do not currently require an applicant to prepare performance period analyses of the waste that would be disposed of at its site. Proposed 10 CFR 61.13(e) is a new section that would require a licensee to prepare a new performance period for those licensees proposing to dispose of LLRW streams containing radionuclides with average concentrations exceeding values listed in proposed Table A of 10 CFR 61.13(e), or if necessitated by site-specific conditions. The analyses would evaluate how the disposal system may mitigate the risk from the disposal of long-lived LLRW. The performance period analyses are needed to ensure the

protection of general population and inadvertent intruder from certain long-lived waste and to determine whether limitations on the disposal of some LLRW stream at certain sites may be needed to properly manage the disposal of LLRW.

10 CFR 61.13(f) is a new paragraph. The NRC proposes to add this new paragraph to require licensees and applicants to prepare analyses that demonstrate the land disposal facility includes defense-in-depth protections. The analyses would identify and describe the features of the design and site characteristics that provide multiple independent and redundant layers of defense so that no single layer, no matter how robust, is exclusively relied upon during operations of the facility and after closure during the compliance period, protective assurance period, or performance period.

Section 61.28 of 10 CFR Part 61 provides a list of items that must be included in an application for closure. The revised 10 CFR 61.28 would require licensees to provide updated site-specific analyses as specified in the revised 10 CFR 61.41, 61.42, 61.44 and 61.13(e) and (f), using the details of the final closure plan and waste inventory. Current 10 CFR 61.28 does not require licensees to provide an updated site-specific analysis. This requirement is necessary to enhance the safe disposal of LLRW.

<u>Section 61.41</u> of 10 CFR Part 61 would be split into three paragraphs.

10 CFR 61.41(a) would retain the dose limits and the ALARA concept, and would be updated to use dose methodology that is consistent with the dose methodology used in 10 CFR Part 20. Compliance with the proposed 10 CFR 61.41(a) paragraph would be demonstrated through analyses that meet the requirements specified in the proposed 10 CFR 61.13(a).

10 CFR 61.41(b) is a new paragraph. that would require that the licensee to minimize releases of radioactivity from a disposal facility to the general environment during the protective assurance period. It would specify that an annual dose, established on the license, shall be below 5 millisieverts (500 millirems) or a level that is supported as reasonably achievable based on technological and economic considerations in the information submitted for review and approval by the Commission. The proposed annual dose would be consistent with the dose methodology used in 10 CFR Part 20. Compliance with this paragraph must be demonstrated through analyses that meet the requirements specified in 10 CFR 61.13(a).

10 CFR 61.41(c) is a new paragraph that would require that the licensee make an effort to minimize releases of radioactivity from a disposal facility to the general environment to the maximum extent reasonably achievable at any time during the performance period. Compliance with the proposed 10 CFR 61.41(c) would be demonstrated through analyses that meet the requirements specified in the proposed 10 CFR 61.13(e).

These requirements are necessary to bring 10 CFR Part 61 dose methodology

up to date with the methodology used in 10 CFR Part 20 and to demonstrate compliance with the protection of the general population from releases of radioactivity.

<u>Section 61.42</u> would be split into three paragraphs.

10 CFR 61.42(a) would retain the current regulatory language and would be updated to add an annual dose limit of 5 mSv/yr (500 mrem/yr) for the intruder assessment. Compliance with the proposed 10 CFR 61.42(a) paragraph would be demonstrated through analyses that meet the requirements specified in the proposed 10 CFR 61.13(b).

10 CFR 61.42(b) is a new paragraph that would require the licensee to minimize exposures to any inadvertent intruder during the protective assurance period. It would also specify that an annual dose, established on the license, shall be below 5 millisieverts (500 millirems) or a level that is supported as reasonably achievable based on technological and economic considerations in the information submitted for review and approval by the Commission. The proposed annual dose would be consistent with the dose methodology used in 10 CFR Part 20. Compliance with this paragraph must be demonstrated through analyses that meet the requirements specified in 10 CFR 61.13(b).

10 CFR 61.42(c) is a new paragraph that would require that the licensee make effort to minimize exposures to any inadvertent intruder to the maximum extent reasonably achievable at any time during the performance period. Compliance with the proposed 10 CFR 61.42(c) would be demonstrated through analyses that meet the requirements specified in the proposed 10 CFR 61.13(e).

These new requirements are necessary to enhance the protection of any inadvertent intruder who occupies the site or contacts the waste at any time after active institutional controls are removed.

Section 61.44 of 10 CFR Part 61 currently requires the disposal facility to be sited, designed, used, operated, and closed to achieve long-term stability of the disposal site and to eliminate to the extent practicable the need for ongoing active maintenance of the disposal site following closure so that only surveillance, monitoring, or minor custodial care are required. The NRC proposes to revise 61.44 to specify that stability of the disposal site must be demonstrated for the compliance and protective assurance periods. The NRC believes this change would not result in an increase in burden to licensees because it only clarifies the time frame for the stability demonstration.

<u>Section 61.57</u> of 10 CFR Part 61 would update labeling requirements for packages of waste. Currently, packages are labeled according to whether they are Class A waste, Class B waste, or Class C waste. Licensees use the NRC Form 541, "Uniform Low-Level Radioactive Waste Manifest" for this purpose. The NRC proposes to amend NRC Form 541 to add a column 17 entitled, "Meets Waste Acceptance Criteria, if applicable." Licensees using Waste Acceptance Criteria would check this box, rather than indicating the waste class in column 16.

The NRC believes this change to the form is insignificant, and would not result in an increase in burden to licensees.

Section 61.58 of 10 CFR Part 61 would require submission of criteria for the acceptance of waste for disposal. The LLRW acceptance plan_would specify the minimum content of the waste acceptance criteria (WAC), as well as, require disposal facility licensees to develop approaches for generators to characterize LLRW and methods for generators to certify that such LLRW meets the acceptance criteria for demonstration compliance with the site-specific WAC. Proposed 10 CFR 61.58(f) would also require licensees to periodically review their LLRW acceptance plan and to comply with 10 CFR 61.20 in modification of their approved WAC. Section 61.58(g) of 10 CFR Part 61 would allow applications for modification of approved WAC. This proposed amendment would provide reasonable assurance that public health and safety would continue to be protected during the land disposal of LLRW.

<u>Section 10 CFR 61.80(m)</u> is a new paragraph that would require the licensees to maintain LLRW acceptance records for three years after the record is made.

2. Agency Use of Information

The site-specific technical analyses requirement, and the LLRW acceptance criteria, in the proposed amendment would be used to ensure compliance with the performance objectives in Subpart C of 10 CFR Part 61, which would ensure that LLRW streams that are significantly different from those considered during the development of the current regulations can be disposed of safely and meet the performance objectives for land disposal of LLRW. These amendments would also increase the use of site-specific information to ensure public health and safety continues to be protected.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface, or other means.

The NRC estimates that the overall percentage of responses filed electronically under the new requirements is 100%.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available and there is no duplication of requirements. Section 10 CFR 61.21 specifically provides an opportunity for the applicant to avoid repetition in filing licensing submittals by referencing previously submitted material. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

None of the licensees meet the criteria of small business. In addition, since the total number of applicants is expected to be small and the information needs are the same for both large and small entities, it is not possible to reduce the burden on small businesses by less frequent or less complete reporting or recordkeeping procedures.

6. Consequences to Federal Program or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently

If the NRC does not modify 10 CFR Part 61, no compliance period and protective assurance period analyses would be required, no defense-in-depth analysis would be required, no period of performance would be specified, no performance period analysis would be required, no intruder assessment would be required, and development of LLRW acceptance plan would not be required. Although the NRC believes that 10 CFR Part 61 is adequate to protect public health and safety, requiring new and revised site-specific technical analyses to demonstrate compliance with the Subpart C performance objectives and develop criteria for LLRW acceptance, based on the results of these analyses, would enhance the safe disposal of LLRW and would provide added assurance that LLRW streams not considered in the original 10 CFR Part 61 regulatory basis comply with the Subpart C performance objectives. Further, these analyses would identify any additional measures that would be prudent to implement, and these amendments would facilitate implementation and better align the requirements with current health and safety standards. Not taking the proposed action would not provide the added assurance that disposal of the LLRW streams not considered in the original 10 CFR Part 61 regulatory basis comply with the Subpart C performance objectives. The NRC is already conducting information collecting at a minimum frequency (i.e., application renewal and application for facility closure).

7. <u>Circumstances Which Justify Variation from OMB Guidelines</u>

None

8. Consultations Outside the NRC

On May 3, 2011, the NRC published preliminary proposed rule language and an associated regulatory basis document on http://www.regulations.gov for early public comment (76 FR 24831). In conjunction with the publication of the preliminary documents, the staff conducted a public meeting on May 18, 2011, in Rockville, MD, to discuss the preliminary proposed rule language and its associated regulatory basis documents. Since then and based on the Commission's direction in a Staff Requirements Memorandum to COMWDM-11-0002/COMGEA-11-0002 (ADAMS accession number ML120190360), the NRC revised the regulatory basis document associated with this rulemaking and developed a second (November 2012) version of the preliminary rule language. On December 7, 2012, the staff published the November 2012 preliminary rule language on http://www.regulations.gov, under Docket ID NRC-2011-0012, for public comment (76 FR 24831).

The NRC staff also briefed the Advisory Committee on Reactor Safeguards (ACRS), Radiation Protection and Nuclear Materials Subcommittee, on June 23 and August 17, and then the Full Committee on July 13 and September 8, 2011. The ACRS provided additional comments, which the staff also considered in the development of the proposed rule. The NRC staff again briefed the ACRS, Radiation Protection and Nuclear Materials Subcommittee, on April 9, 2013, and the full committee on July 10, 2013.

Opportunity for public comment on the information collection requirements for this proposed rule has been published in the *Federal Register*.

9. Payment or Gift to Respondents

Not applicable.

10. <u>Confidentiality of Information</u>

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). However, no confidential or proprietary information will be requested.

11. <u>Justification for Sensitive Questions</u>

None.

12. Estimated Burden and Burden Hour Cost

There are four LLRW disposal facility licenses that have been issued by the Agreement States and are currently in effect (in Utah, Washington, Texas, and South Carolina). The four existing licensees are currently accepting long-lived LLRW (e.g., depleted uranium) but only two facilities are expected to continue to do so in the future. If all four facilities continued to accept long-lived waste, the costs related to the performance period analysis would increase.

If the NRC would modify 10 CFR Part 61, the four existing licensees would be required to conduct each of the following analyses only once during their operation cycle:

- 1. Initial compliance period, protective assurance period, and performance period site-specific technical analyses, as required by 10 CFR 61.41, 61.42, and 61.13(e), and develop an initial LLRW acceptance plan.
- 2. Updated compliance period, protective assurance period, and performance period site-specific technical analyses during the facility operational period, also required by 10 CFR 61.41, 61.42, and 61.13(e).
- 3. Updated compliance period, protective assurance period, and performance period site-specific technical analyses during facility closure as required by 10 CFR 61.28.

The burden of conducting the updated compliance period, protective assurance period, and performance period site-specific technical analyses, and LLRW acceptance plan, during normal facility operation period, is estimated to be 40

percent of the burden of conducting the initial compliance period, protective assurance period, and performance period site-specific technical analyses, and LLRW acceptance plan. The burden of conducting the updated compliance period, protective assurance period, and performance period site-specific technical analyses, and LLRW acceptance plan, during facility closure, is also estimated to be 40 percent of the burden of conducting the initial compliance period and performance period site-specific technical analyses, and LLRW acceptance plan.

REPORTING BURDEN

The initial burdens would include:

- compliance period and protective assessment period analyses (which includes defense-in-depth analyses, as required by 10 CFR 61.13(f), a performance assessment, as required by 10 CFR 61.41 an intruder assessment, as required by 10 CFR 61.42,), with an estimated burden of 8,880 hours;
- 2) performance period analyses, as required by 10 CFR 61.13(e), with an estimated burden of 1,776 hours; and
- 3) LLRW acceptance plan as required by 10 CFR 61.58, with an estimated burden of 1,776 hours.

The total estimated burden to conduct the initial site-specific analyses would be 12,432 hours (8,880 + 1,776 + 1,776).

The burdens for updating analyses during normal facility operation include:

- 1) updated compliance period and protective assurance period analyses (which includes and updated defense-in-depth analyses, as required by 10 CFR 61.13(f), an updated performance assessment, as required by 10 CFR 61.41, an updated intruder assessment, as required by 10 CFR 61.42,), with an estimated burden of 3,552 hours;
- 2) updated performance period analyses, as required by 10 CFR 61.13(e), with an estimated burden of 888 hours; and
- 3) updated LLRW acceptance plan as required by 10 CFR 61.58, with an estimated burden of 888 hours.

The total estimated burden to conduct the updated site-specific technical analyses and LLRW acceptance plan, during facility operation, would be 5,328 hours (3,552 + 888 + 888).

The burdens for updating analyses during facility closure as required by 10 CFR 61.28, include:

- updated compliance period and protective assurance period analyses (which includes and updated defense-in-depth analyses, as required by 10 CFR 61.13(f), an updated performance assessment, as required by 10 CFR 61.41, an updated intruder assessment, as required by 10 CFR 61.42,), with an estimated burden of 3,552 hours:
- 2) updated performance period analyses, as required by 10 CFR 61.13(e), with an estimated burden of 888 hours.

The total estimated annualized burden to conduct the updated site-specific technical analyses during facility closure would be 4,440 hours (3,552 + 888).

RECORDKEEPING BURDEN

Under proposed 10 CFR 61.80(m), licensees would be required to maintain LLRW acceptance records for three years after the record is made. The estimated annual burden for recordkeeping is 40 hours.

In addition, licensees would also be required, by the proposed 10 CFR 61.58(f), to conduct an annual review of the LLRW acceptance plan to determine if they need to be updated, to ensure that the LLRW disposal facility continues to comply with the Subpart C performance objectives. The NRC estimated this burden to be 40 hours.

The total annual recordkeeping burden is estimated to be 80 hours (40 + 40), as shown in Table 2.

BURDEN DURING THE CURRENT CLEARANCE PERIOD

This supporting statement assumes that the burden to conduct the initial site-specific technical analyses will be incurred in calendar year 2019, based on the assumption that the NRC will publish the final rule in 2016 and the Agreement States will take 3 years to develop their conforming regulations and to adopt the final 10 CFR Part 61 regulations. (All four existing LLRW disposal facility licensee are in Agreement States). Thus, the total burden and cost for 10 CFR Part 61 site-specific technical analyses and LLRW acceptance plan requirements for respondents to respond to the information collection activities is 0 hours, because no licensees are expected to amend the existing license or apply for new license during this clearance period. The NRC has estimated burden for each of the site specific technical analyses requirements by the proposed rule and are included in Table 1.

In addition, the site specific technical analyses requirements are not retroactive. Licensees are not required to provide these analyses until the time of license amendment or new license application. No licensees are expected to renew or apply for new license during this clearance period.

FUTURE BURDEN

As estimated above, implementation of this proposed rule would require an estimated 12,432 hours per licensee (4,144 hours annualized); updating analyses during operation would require 5,328 hours per licensee (1,776 hours annualized); and updating analyses at closure would require 4,440 hours per licensee (1,480 hours annualized), for a total of 22,200 hours reporting burden per licensee (7,400 hours annualized). Each of these reporting burdens are one-time burdens, and will be reflected in the supporting statement for Part 61 as the licensees perform the requirements.

Once licensees have updated their waste acceptance plans, they will incur an additional annual recordkeeping burden of 80 hours.

13. Estimate of Other Additional Costs

There are no additional costs.

Estimated Annualized Cost to Federal Government

There is no estimated annual cost to the Federal government for reviewing applications and reports, responding to notifications, and inspecting applicable records. Because the four existing licensees are in Agreement States, the States in which they are located are responsible for these functions.

15. Reasons for Changes in Burden or Cost

The burden for this information collection has not changed for the upcoming 3-year clearance period, because the four existing LLRW licensees located in Agreement States will not implement the changes for four years after publication of the final rule. No licensees are expected to amend or apply for new license during this clearance period.

The burden impact of the information collection will be a future increase due to the site-specific technical analyses and LLRW acceptance plan requirements in this rule. The changes in burden for this rulemaking will impose a total estimated reporting burden of up to 22,200 hours on each of four LLRW licensees who are submitting a license application or amending an existing license to accept LLRW. In addition, once licensees have updated their waste acceptance plans, they will incur an additional annual recordkeeping burden of 80 hours.

Compliance period and protective assurance period site-specific technical analyses are performance assessments and intruder assessments that estimate peak annual doses that occur within 10,000 years, as required by 10 CFR 61.13(f),10 CFR 61.41, and 10 CFR 61.42, respectively. Compliance period updated site-specific technical analyses are also required by 10 CFR 61.28. Compliance period site-specific technical analyses are needed to demonstrate compliance with Subpart C performance objectives and to ensure the continued protection of the public health and safety.

Performance period technical site-specific technical analyses are analyses that estimate impacts from disposal of LLRW that occur beyond 10,000 years, as required by 10 CFR 61.13(e). Performance period updated site specific technical analyses are also required by 10 CFR 61.28. The performance period site-specific technical analyses are needed to ensure the protection of the general population and inadvertent intruder from long-lived LLRW and to determine whether limitations on the disposal of some LLRW streams at certain sites may be needed to properly manage the disposal of LLRW.

Licensees would amend their licenses when new activities occur at their site, during normal facility operation, or are undergoing facility closure. New activities could range from accepting new unanalyzed LLRW streams, installing new engineered barriers, and/or having new information pertaining to site characteristics or behavior. Updated site-specific technical analyses are needed for license amendments to demonstrate compliance with Subpart C performance

objectives and to ensure the continued protection of the public health and safety. No licensees are expected to amend or apply for new license during this clearance period.

16. Publication for Statistical Use

None.

17. Reason for Not Displaying the Expiration Date

The requirements are contained in a regulation. Amending the *Code of Federal Regulations* to display information in an annual publication could become obsolete, would be burdensome, and would be too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this collection of information.

Table 1
One-time Reporting Requirements under 10 CFR Part 61

Section	Description	No. of Respondents	Responses per Respondent	Total Responses	Burden Hours per Response	Total Annual Burden (Hrs) \$279
61.13(a)&(b), 61.13(f), 61.41, and 61.42.	Initial compliance period and protective assurance period analyses¹ (within 10,000 years)	0	1	0	8,880	0
61.13(a)&(b), 61.13(f), 61.41, and 61.42.	Updated compliance period and protective assurance period analyses (within 10,000 years) during normal facility operation	0	1	0	3,552	0
61.13(e) and 61.13(f)	Initial performance period analyses ² (>10,000 years)	0	1	0	1,776	0
61.13(e) and 61.13(f)	Updated performance period analyses (>10,000 years) during normal facility operation	0	1	0	888	0
61.28	Updated compliance period and protective assurance period analyses³ (within 10,000 years) during facility closure.	0	1	0	3,552	0
61.28	Updated performance period analyses (>10,000 years) during facility closure.	0	1	0	888	0
61.58	Initial LLRW acceptance plan	0	1	0	1,776	0
61.58	Updated LLRW acceptance plan	0	1	0	888	0
Total		0		0	22,200	0

NOTE: The four current licensees are Agreement State licensees (SC, WA, UT, and TX). Assuming that all four licensees choose to submit a license amendment to change waste streams, they will need to incur one-time burdens to conduct the initial site-specific technical analyses, which include:

¹ Compliance period (i.e., the first 1,000 years after site closure) and protective assurance period (i.e., 1,000 to 10,000 years after site closure) analyses include both a performance assessment and an intruder assessment.

² Performance period analyses (i.e., 10,000 years and later after site closure) evaluate how the disposal system could mitigate the risk from long-lived LLRW. Only facilities possessing long-lived LLRW would have this burden.

1) the compliance period and protective assurance period analyses, and 2) the performance period analyses. These initial site-specific analyses will be performed four years from rule implementation, due to a three-year delay in the development of Agreement State regulations. None of the burdens will be incurred during the three year clearance period.

Each of the above reporting requirements is a one-time requirement, and the totals given reflect the total time to complete analyses. The total reporting burden impact of the proposed rule on an existing LLRW licensee is up to 22,200 hours (7,400 hrs annualized). These burdens will be reflected in future supporting statements for Part 61, as the licensees perform each of the analyses.

Table 2
Annual Record Keeping Requirements under 10 CFR Part 61

Section	Description	No. of Recordkeeper	Responses per Recordkeeper	Total Responses	Burden Hours per Recordkeeper	Total Annual Burden (Hrs) \$279
61.58(f)	Conduct annual review of LLRW acceptance plan	0	1	0	40	0
61.80(m)	Maintain LLRW acceptance records for three years after the record is made	0	1	0	40	0
Total		0		0	80	0

NOTE: The four current licensees are Agreement State licensees (SC, WA, UT, and TX). Assuming that all four licensees choose to submit a license amendment to change waste streams, they will need to incur burdens for record keeping as specified in proposed 10 CFR 61.80(m). These record keeping burdens will be incurred four years from rule implementation, due to a three-year delay in the development of Agreement State regulations. None of the burdens will be incurred during the three year clearance period.

Once licensees have submitted their LLRW acceptance plan, they will incur annual recordkeeping burdens of 80 hours (40 hours + 40 hours). These burdens have been annualized, and reflect the ongoing annual burden for recordkeeping.