



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

April 23, 2019

Mr. Jeffrey D. Isakson
Chief Executive Officer/President
Interim Storage Partners LLC
P.O. Box 1129
Andrews, TX 79714

**SUBJECT: INTERIM STORAGE PARTNERS LLC's LICENSE APPLICATION TO
CONSTRUCT AND OPERATE THE WASTE CONTROL SPECIALISTS
CONSOLIDATED INTERIM STORAGE FACILITY, ANDREWS COUNTY,
TEXAS, DOCKET NO. 72-1050 – FIRST REQUEST FOR ADDITIONAL
INFORMATION, PART 3**

Dear Mr. Isakson:

By letter dated July 19, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18206A595), Interim Storage Partners LLC (ISP), a joint venture of Waste Control Specialists LLC (WCS) and Orano CIS LLC (a subsidiary of Orano USA), requested that the U.S. Nuclear Regulatory Commission (NRC) resume all safety and environmental review activities associated with the proposed WCS Consolidated Interim Storage Facility (WCS CISF) license application. ISP requested authorization to store up to 5,000 metric tons of uranium for a period of 40 years in the WCS CISF.

The NRC staff is conducting a detailed technical review of your application and has determined that additional information is necessary to complete its review. The information needed by the NRC staff is discussed in the enclosed request for additional information (RAI). Consistent with our August 21, 2018, letter notifying you of our decision to resume the WCS CISF technical review, the NRC staff expected to issue its first round RAIs in several parts (ADAMS Accession No. ML18225A281). This is the third and final part of the NRC staff's first round RAIs.

We request that you provide responses within 60 days from the date of this letter. If you are unable to meet this deadline, please notify NRC staff in writing, within two weeks of receipt of this letter, of your new submittal date and the reasons for the delay.

Please reference Docket No. 72-1050 and CAC/EPID 001028/L-2017-NEW-0002 in future correspondence related to the technical review for this licensing action. If you have any questions, please contact me at (301) 415-0262.

Sincerely,

/RA/

John-Chau Nguyen, Senior Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 72-1050
CAC No. 001028
EPID L-2017-NEW-0002

Enclosure:

1. 1st Round Safety and
Environmental RAIs – Part 3

SUBJECT: INTERIM STORAGE PARTNERS LLC's LICENSE APPLICATION TO
CONSTRUCT AND OPERATE THE WASTE CONTROL SPECIALIST
CONSOLIDATED INTERIM STORAGE FACILITY, ANDREWS COUNTY, TEXAS,
DOCKET NO. 72-1050 – FIRST REQUEST FOR ADDITIONAL INFORMATION,
PART 3, DOCUMENT DATE: April 23, 2019

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ADAMS Accession No.: ML19120A428

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First Request for Additional Information, Part 3
Docket No. 72-1050

WCS Consolidated Interim Storage Facility in Andrews County, Texas

By letter dated July 19, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18206A595), Interim Storage Partners LLC (ISP), a joint venture of Waste Control Specialists LLC (WCS) and Orano CIS LLC (a subsidiary of Orano USA), requested that the U.S. Nuclear Regulatory Commission (NRC) resume all safety and environmental review activities associated with the proposed WCS Consolidated Interim Storage Facility (WCS CISF) license application. ISP requested authorization to store up to 5,000 metric tons of uranium for a license term of 40 years in the WCS CISF application.

This request for additional information (RAI) identifies additional information needed by the NRC staff to complete its safety and environmental reviews of the WCS CISF license application. For the safety RAI, the requested information refers to the specific part of the license application concerning proposed license conditions. The NRC staff used the guidance in NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities."

For the environmental RAIs, the requested information is sorted by topic and environmental resource area. This information will aid the NRC staff's preparation of its Environmental Impact Statement that is being prepared to fulfill the requirements of the *National Environmental Policy Act of 1969*, as amended (NEPA), and the NRC's NEPA implementing regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions."

License Application, Attachment A, "Proposed License Conditions"

RAI PLC-3: Provide the following information on the incorporation of aging management programs (AMPs):

1. Clarify the meaning of "applicable portions of License Renewals" that will be incorporated by reference through license amendments described in proposed Condition 20. As appropriate, clarify the language of proposed Condition 20.

ISP has proposed License Condition #20 to incorporate AMPs through license amendments. The proposed License Condition #20 states:

The Licensee shall submit License Amendment(s) to this license to incorporate applicable portions of License Renewals listed below, within 120 days of the effective date of License Renewal Approval for each of the following:

Clarify the criteria for determining what portions of the License Renewals are "applicable" or whether updated time limited aging analyses (TLAAs) and any other supporting analyses included in the certificate of compliance (CoC) renewals will be included in the license amendments identified in proposed License Condition #20.

The NRC staff acknowledges that ISP has indicated in response to RAI 15-13 that the AMPs for the renewed 72-1004 system will be incorporated into the WCS CISF application.

2. Describe the content and timing of amendments to address aging management activities including AMPs and TLAAs for systems that either have entered, or will enter, the period of extended operation if the current CoC holder is not able to complete the CoC renewal or has chosen not to renew the CoC. As appropriate, clarify the language of proposed License Condition #20.

The proposed License Condition #20, as written, states that ISP will “incorporate applicable portions of License Renewals listed below, within 120 days of the effective date of License Renewal Approval.” The proposed license condition does not address the possibility that the current CoC holder either would choose to not renew the CoC or may not be able to renew the CoC and, therefore, applicable AMP and TLAA information would not be supplied by the CoC holder for incorporation by ISP. The applicant should describe how the licensing basis provides a process for ensuring that appropriate and timely AMP and TLAA information is proposed for incorporation into the ISP license if a CoC renewal application was not submitted and completed by the current CoC holder.

This information is needed to ensure that the NRC can make the findings required by 10 CFR 72.40(a) for issuance of a license.

Environmental Requests for Additional Information

Proposed Action (PA)

RAI PA-1

Provide additional information on the railroad side track to be built as part of the proposed CISF. This information should include:

- Clarification of the location (i.e., footprint) of the railroad side track. The location of the proposed railroad side track is not consistently depicted in figures in the Environmental Report (ER). For example, compare ER Figure 2.2-6 with ER Figure 4.5-1. Specifically, clarify whether the railroad side track would cross Stateline Road into New Mexico as depicted in ER Figure 4.5-1.
- The status of any Federal, State, or local permits or approvals that would be needed to construct and operate the railroad side track, as applicable both in Texas and New Mexico (as depicted in ER Figure 4.5-1, the railroad side track appears to be partly located in both states).
- A description of the materials, methods, and equipment that would be used to construct, operate, and maintain the railroad side track, including timing of the construction. If the side track would be decommissioned along with the CISF, include similar information for decommissioning.
- Local natural resources (e.g., groundwater, geologic materials) and manpower needed to construct and operate the railroad side track; and whether or not construction and operation workers for the railroad side track are already included in the resource impacts analysis in the ER (transportation, socioeconomics, etc.).

- The amount of land that would be disturbed by construction and operation of the railroad side track.
- The volume of soil that would be excavated during construction and potentially stockpiled during operation of the railroad side track and available information on the disposition of the stockpiled soil.
- An assessment of the environmental impacts that construction, operation, and decommissioning of the railroad side track would have on all resource areas (e.g., land use, transportation, geology and soils, water resources, air quality, ecological resources, historic and cultural resources, noise, visual and scenic, socioeconomics, public and occupational health, and waste management).
- Mitigation measures that would be implemented to reduce the environmental impacts associated with construction, operation, and decommissioning of the railroad side track on all resource areas.
- Any environmental measures, management plans, and/or monitoring that would be required during construction, operation, and decommissioning of the railroad side track to comply with any Federal, State, and local rules and regulations.

ER Section 2.2.2.5 states that an approximately 2,134 m [7,000 ft] railroad side track would be built adjacent to the existing railroad access loop for spent nuclear fuel (SNF) deliveries to the proposed CISF. The ER provides limited information on the construction, operation, and decommissioning activities associated with the railroad side track. Specifically, additional information on the railroad side track is needed to support the NRC staff's description of the proposed action and evaluation of environmental impacts in the Environmental Impact Statement (EIS).

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the proposed action and discuss the impacts of the proposed action.

RAI PA-2

Provide additional information on the new concrete batch plant to be constructed as part of the proposed CISF. This information should include:

- The size (acreage) of the batch plant and a figure showing its outline and location with respect to the proposed CISF and current site facilities.
- The design of the concrete batch plant (description of major components) and associated infrastructure (e.g., access roads, pipelines, utilities, and areas for parking, waste management, chemical storage, and maintenance).
- Any state and local permits or approvals that would be needed to construct and operate the batch plant.
- A description of construction, operation, and decommissioning activities for the concrete batch plant and an anticipated schedule for construction, operation, and decommissioning.

- The amount and source of water needed to operate the batch plant.
- Manpower needed to construct and operate the batch plant and whether or not construction and operation workers for the batch plant are already included in the resource impacts analysis in the ER (transportation, socioeconomics, etc.).
- The amount of land that would be disturbed during construction and operation of the batch plant and associated infrastructure.
- The volume of soil that would be excavated during construction and potentially stockpiled during operation of the batch plant, and available information on the disposition of the stockpiled soil.
- An assessment of the environmental impacts that construction, operation, and decommissioning of the batch plant would have on all resource areas (e.g., land use, transportation, geology and soils, water resources, air quality, ecological resources, visual and scenic resources, historic and cultural resources, noise, socioeconomics, public and occupational health, and waste management).
- Mitigation measures that would be implemented to reduce the environmental impacts associated with construction, operation, and decommissioning of the batch plant on all resource areas.
- Any environmental measures, management plans, and monitoring that would be required during construction, operation, and decommissioning of the concrete batch plant to comply with state and local rules and regulations.

ER Section 2.2.2.6 states that a concrete batch plant may be constructed to facilitate storage module construction and future expansion of the site. The ER provides limited information on the construction, operation, and decommissioning activities associated with the batch plant. Specifically, additional information on the batch plant is needed to support the NRC staff's description of the proposed action and evaluation of environmental impacts, including cumulative impacts, in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the proposed action and discuss the impacts of the proposed action.

RAI PA-3

Provide additional information concerning the site selection process.

ER Section 2.3 and Attachment 2-2 provide a discussion of the criteria and weighting factors that ISP used to identify potential locations to site the proposed CISF, as well as the scores for the four sites considered. Table 2.3-4 in the ER provides the overall scoring based on three criteria: siting, environmental considerations, and operational considerations. The discussion in ER Section 2.3.3 identifies certain criteria either as environmental considerations or as operational considerations; however, no siting criteria are identified. As a result, it is not clear how siting scores were determined in Table 2.3-4. Therefore, please clarify how the siting scores were calculated.

Additionally, in ER Section 2.3.7, ISP provides its review of a potential site in Eddy County, New Mexico. One of the references used is a 2015 report from Cox McLain Environmental Consulting. The NRC staff was not able to locate this report within ISP's license application. Therefore, please provide a copy of the report or point the staff to its location within the application.

This information is needed in accordance with 10 CFR 51.45(b) and (b)(3), which requires that the ER include a description of the proposed action and alternatives to the proposed action.

NEPA PROCESS (NP)

RAI NP-1

Provide a list of relevant meetings, hearings, and presentations that have been made to organizations in the local communities and other parts of Texas and New Mexico that have been held to explain ISP's storage interests related to the proposed CISF.

The ER should provide a description of ISP's outreach efforts made to inform communities and affected populations within the region of the proposed CISF. This information would assist the NRC staff's analysis regarding the potential for disproportionate impacts to communities.

This information is needed in accordance with 10 CFR 51.45(c), which requires the ER to include sufficient data to aid the NRC in its development of an independent analysis.

REGULATORY REQUIREMENTS AND PERMITTING (RRP)

RAI RRP-1

Provide, in tabular format, a list of all Federal, State, Tribal, or local approvals, authorizations, certifications, consultations, and permits that would be necessary to construct and operate the proposed CISF and associated infrastructure. Include in the list the status of the approval, authorization, certification, consultation, or permit (e.g., yet to be submitted, submitted, under review, issued).

ER Section 1.3 provides a general discussion of applicable regulatory requirements, permits, and required consultations for construction and operation of the proposed CISF. Based on the NRC staff's review, it appears that some regulatory and permitting requirements are not discussed in the ER. For example, State permitting requirements may apply to construction and operation of the railroad side track that may extend into New Mexico (see ER Section 2.2.2.5 and ER Figure 4.5-1) and a new concrete batch plant (see ER Section 2.2.2.6). A complete discussion of applicable regulatory requirements is needed to support the NRC staff's description and evaluation of applicable statutory, regulatory, and permitting requirements in the NRC's EIS.

This additional information is needed in accordance with 10 CFR 51.45(d), which requires that the ER include a list of all Federal, State, regional, and local permits, licenses, approvals and other entitlements that the applicant must obtain, as well as a description of the status of compliance with these requirements.

LAND USE (LU)

RAI LU-1

Provide a figure showing land use classification as identified in the ER within 8 km [5 mi] of the proposed CISF boundaries.

ER Section 3.1 states that land use classification in the vicinity of the proposed CISF is primarily rangeland, built-up land, and barren land. Provide specific information on the distribution of classes of land use within and surrounding the proposed CISF. NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, recommends figures should be used to describe the area for land use (NRC, 2003). In addition, NUREG-1567, Standard Review Plan for Spent Fuel Dry Storage Facilities, recommends that land use should be described within an 8-km [5-mi] radius of independent spent fuel storage facilities (ISFSIs) (NRC, 2000). The requested information is needed to support the NRC staff's description of the affected environment and evaluation of environmental impacts in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and discuss the impacts of the proposed action.

RAI LU-2

Provide information on the number and location of wells (including a figure) associated with oil and gas exploration and development within a 10-km [6-mi] radius of the proposed CISF. The figure should indicate the type of well (e.g., oil, gas, injection, salt water disposal, etc.) and its status (e.g., active, plugged, dry and abandoned, shut in, etc.). In addition, provide information on oil and gas leasing including a figure illustrating existing oil and gas leases within a 10-km [6-mi] radius of the proposed CISF.

ER Section 3.1 states that land uses within a few miles of the proposed CISF includes drilling for and production from oil and gas wells and that the Elliott Littman oil field is to the northwest, the Freund and Nelson oil fields are to the south, the Paddock South and Drinkard oil fields are to the southwest, and the Fullerton oil field is to the east. However, the ER does not provide specific information on the type, status, and location of the oil and gas wells in the area of the proposed CISF. Specifically, this information is needed to support the NRC staff's description of the affected environment and evaluation of environmental impacts.

This additional information is needed in accordance with 10 CFR 51.45(b), which requires that the ER include a description of the affected environment, and 10 CFR 51.45(b)(1), which requires that the ER discuss the impacts of the proposed action.

RAI LU-3

Clarify the total site footprint (i.e., area) for the proposed CISF, including the area that would contain the new rail siding, and indicate whether the calculated total disturbed area and total disturbed soils take the rail siding into account.

ER Section 3.1 states that the proposed CISF would include 130 ha [320 ac] of land within the WCS property boundary. However, the description of the land area does not explicitly state whether the area includes land for the new rail siding. Therefore, clarification is needed on both

the total land and soil areas disturbed by the proposed action (including the new rail siding). This information is needed to support the NRC staff's description of the proposed action and evaluation of environmental impacts in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and discuss the impacts of the proposed action.

TRANSPORTATION (TR)

RAI TR-1

Provide an analysis of radiological impacts to workers from transportation.

The analyses of radiological impacts from transportation in ER Sections 4.2.6; 4.2.7; 4.2.8; and Attachment 4-1 do not appear to specifically describe radiological impacts or any dose calculations applicable to transportation workers such as vehicle crew members and escorts, cargo handlers and inspectors, rail yard workers, or to emergency response personnel. For example, the ER incident-free population dose estimate is described as applying to "residents," and accident calculations do not provide details as to whether the exposed population includes transportation workers. Because workers would be exposed to radiation and risks from the proposed transportation shipments, an analysis of radiological impacts that addresses workers should be included as part of the transportation impact analysis. This is consistent with NRC guidance in NUREG-1748, which states that radiological impacts to both the public and workers should be evaluated (NRC, 2003).

This information is needed in accordance with 10 CFR 51.45(c), which requires analyses in ERs to be quantitative to the fullest extent practicable.

RAI TR-2

Provide additional information on RADTRAN code transportation dose and risk assessment input parameter selections.

A subset of RADTRAN code input parameters is tabulated or otherwise described in the ER (Sections 4.2.6; 4.2.7, 4.2.8, and Attachment 4-1). If any other RADTRAN input parameters that were used in any ER transportation radiological risk assessment calculations (addressing both incident-free transportation and accidents) were modified from code defaults, these parameters should be identified along with the technical bases and applicable source references for parameter values. Complete documentation of the calculation inputs is necessary for the NRC staff to evaluate the technical correctness and applicability of these calculations to the proposed action.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-3

Provide the input and output files for transportation dose and risk calculations conducted with the RADTRAN and WebTRAGIS codes and provide links to the applicable ER analyses.

ER Sections 4.2.6, 4.2.7, 4.2.8, and Attachment 4-1 indicate that transportation doses and risks were calculated using the RADTRAN code for risk assessment and the WebTRAGIS code for routing. Code input and output files will allow the NRC staff to verify that the computer code runs support the calculation methods, assumptions, input parameters, and results that are described in the ER. Because the ER includes several different transportation dose/risk calculations, information should also be provided that links specific files to the applicable ER analysis results (e.g., 3 incident-free representative routes; 3 types of accident analyses; 12 short-distance heavy-haul truck or barge routes).

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-4

Provide post- processing dose and risk calculation spreadsheets used to assess radiological impacts from transportation.

ER Sections 4.2.6.1 and Attachment 4-1 indicate that transportation dose results were calculated using spreadsheets. These ER Sections indicated that these spreadsheets incorporated the results of RADTRAN code output (unit risk factors) and WebTRAGIS output (routing details) to calculate transportation doses. The requested information will allow the NRC staff to verify that the calculations are technically correct and consistent with the methods, assumptions, input parameters, and results described in the ER.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-5

Provide the transportation study that is referenced in ER Section 4.2.6 as Attachment 4.1.

ER Section 4.2.6 describes that the transportation analysis evaluated both incident-free transportation and accidents and references a study entitled "Transportation of Spent Nuclear Fuel to and from the Waste Control Specialists Proposed Consolidated Interim Storage Facility" in "Attachment 4.1" for the analysis. ER Section 4.2.8 (Impacts from Transportation Accidents) also references Attachment 4.1 for more details on accident dose risks. The ER does not appear to have an attachment with that number or title. The ER does include an Attachment 4-1 that contains information supporting RADTRAN incident-free calculations and WebTRAGIS routing, but does not appear to describe accident analysis methods or calculations.

As a result, please provide further information on the methodology or calculations used to determine the impacts of transportation accidents. If this information is included in an analysis that was omitted from the Environmental Report, that may be used to satisfy this request. The requested information will allow the NRC staff to verify that the application contains complete and accurate references.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-6

Clarify the source documents that were used for calculating transportation accident impacts.

ER Section 4.2.8.2 (Accident Involving a Release of Radioactive Materials) states that accidents involving release of radioactive materials were evaluated by the RADTRAN code but the section does not appear to state whether ISP conducted these code calculations, or if they were from another source. If the RADTRAN calculations were from a prior analysis, the applicable analysis documentation should be referenced. If the RADTRAN calculations were conducted specifically for the ER, that should be clarified and information supporting the code runs including methods, assumptions, inputs, and results should be provided. The requested information will allow the NRC staff to evaluate the technical correctness and applicability of these calculations to the proposed action.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-7

Provide the radionuclide inventory used in transportation accident release calculations.

ER Section 4.2.8.2 (Accident Involving the Release of Radioactive Material) states that the radionuclide inventory used for estimating transportation accident consequences is provided in Attachment 4-1. The inventory information is not provided in Attachment 4-1. The RADTRAN code uses package release fractions in these accident calculations; therefore, the calculated release and dose are a function of the radionuclide inventory. The requested information will allow the NRC staff to review the technical correctness of the transportation accident dose calculations.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-8

Review tabulated loss-of-shielding transportation accident risk analysis results and make necessary corrections.

ER Section 4.2.8.3 [Loss-of-Shielding (LOS) Accidents] refers to results in ER Table 4.2-9 and states that the highest calculated dose is 0.12 rem; however, the table shows a higher calculated dose of 0.26 rem for the Maine Yankee Route. Inconsistent statements in the ER should be corrected.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-9

Provide a missing reference for a cited NRC study in the non-radiological transportation risk analysis and describe the applicability of the analysis to the ISP proposal.

ER Section 4.2.9 (Non-radiological Risks) refers to an NRC analysis of non-radiological transportation risks from shipping SNF to a repository without reference to the analysis. Additionally, this entire section is based on analysis and discussion that is not specific to the ISP proposal with no discussion that links the referenced analyses to the impact analyses and conclusions. The incomplete reference information in the ER should be provided. Additionally, a description of the applicability of referenced analyses to the proposed project should be added so that the technical basis for adoption of results in the ER is clear and transparent with clear linkage of these analyses to any specific impact conclusions.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI TR-10

Revise transportation sections to clarify attribution.

ER Sections 4.2.6, 4.2.7, 4.2.8, 4.2.9, and Attachment 4-1 are written in passive voice that lacks information about attribution (specifically, what parties conducted which analyses). These sections should be reviewed and revised to unambiguously attribute all ISP methods, analyses, assumptions, and conclusions to ISP and attribute other analyses to properly referenced sources.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

GEOLOGY and SOILS (GS)

RAI GS-1

Describe erosion and sediment controls, soil stabilization practices, or structural controls that would be implemented during operation.

ER Section 4.3 identifies increased soil erosion as the result of construction activities due to site clearing and grading. ISP should identify and describe the planned best management practices (BMPs) that it will use to mitigate erosional impacts throughout the life of the CISF site. The additional information about BMPs would be used to assess the potential environmental impacts due to operation of the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(b) and (c), which requires that the ER include a discussion of the impacts to the environment and alternatives available for reducing or avoiding adverse environmental effects.

RAI GS-2

Describe the land surface modification proposed, including the volume of material to be excavated and redistributed and how the natural topography and stratigraphy of the proposed CISF project area would be modified during site leveling.

ER Section 4.3 (Geology and Soils) states that cut-and-fill activities might be required for some portions of the site. Provide information about the land areas that would be leveled and the potential volumes of material that would be exhumed and or redistributed to level the site. ER Section 4.1 (Land Use Impacts) stated “[d]uring the construction phase of the CISF, conventional earthmoving and grading equipment would be used. The removal of very dense soil or caliche may require the use of heavy equipment with ripping tools. Soil removal work for foundations would be controlled to reduce over-excavation to minimize construction costs. In addition, loose soil and/or damaged caliche would be removed prior to installation of foundations for seismically designed structures.” Additional information about ISP’s land surface modification, including details about how the natural topography and stratigraphy at the site would be modified by the proposed action, is needed to assess the potential environmental impacts due to construction and operation of the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(b) and (c), which requires that the ER include a discussion of the impacts of the proposed action and the alternatives available for reducing or avoiding adverse environmental effects.

RAI GS-3

Correlate the U.S. Department of Agriculture (USDA) soil types inferred on the proposed CISF site with the material property data that ISP collected from 18 onsite soil test borings.

A site-specific soil survey of the proposed CISF site has not been performed. Four soil types were previously inferred by USDA to occur on the proposed CISF site; it is unknown how the average material properties associated with these four soil types compare with the actual material properties of soils recently tested onsite. ISP should provide additional information to correlate between the inferred USDA soil types and the recent material property data obtained from onsite soil borings.

This additional information is needed in accordance with 10 CFR 51.45(b), which requires that the ER include a description of the affected environment.

RAI GS-4

Using available data from oil and gas well logs and any other available sources such as geophysical surveys, provide information on the depth and thickness of oil- and gas-producing geologic formations within a 10 km [6 mi] radius of the proposed CISF.

ER Section 3.1 states that land uses within a few miles of the proposed CISF includes drilling for and production from oil and gas wells. Provide information on oil- and gas-producing formations, such as depth and thickness, in the vicinity of the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(b), (b)(1), and (c), which requires that the ER include a description of the affected environment, discuss the impacts of

the proposed action, and contain sufficient data to aid the NRC in its development of an independent analysis.

RAI GS-5

Provide information on deep well injection of wastewater at or near the proposed CISF. This information should include the number and location of injection wells within a 10-km [6-mi] radius of the proposed project area. For each identified injection well, provide information on the geologic formation that wastewaters are being injected into, the depth and thickness of the targeted geologic formation, and injected wastewater volumes and rates.

ER Section 3.1 states that land uses within a few miles of the proposed CISF includes drilling for and production from oil and gas wells, and identifies oil fields northwest, south, southwest, and east of the proposed CISF. The requested information would be used to more accurately describe these current activities in the affected environment.

This additional information is needed in accordance with 10 CFR 51.45(b) and (c), which requires that the ER include a description of the affected environment and contain sufficient data to aid the NRC in its development of an independent analysis.

WATER RESOURCES (WR)

RAI WR-1

Obtain and provide a new U.S. Army Corps of Engineers (USACE) determination documenting the lack of jurisdictional wetlands at and adjacent to the proposed CISF.

The USACE letter concerning “Waste Control Specialists Disposal Site-Non-Jurisdictional Determination Request” (WCS Project No. SWF-2007-173) supplied in ISP’s license application states that the determination was valid for 5 years. The determination, therefore, expired in 2012. Updated surface water information is needed for the NRC staff to assess the potential environmental impacts to surface and groundwater near the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(d), which requires that the ER include a list all Federal permits, licenses, approvals, and other entitlements that the applicant must obtain and a description of the status of compliance with these requirements.

RAI WR-2

Describe in additional detail the potentially affected surface water environment at and near the proposed CISF, including:

- Seasonality of water in internally drained salt basins and surface depressions, including surface areas, seasonal water depths, shoreline lengths and monthly, quarterly, or other seasonal information about how much water the depressions contain throughout the year.
- Whether nearby industrial sites in New Mexico (i.e., Permian Basin Materials/Wallach Concrete Quarry, Sundance Services, LLC/Parabo Disposal Facility, Fish Pond), with artificial, standing surface water bodies, are harboring wetlands.

- Local surface water quality (i.e., surface water chemistry).

The additional information requested is needed to describe the surface water characteristics at and around the proposed CISF, and to evaluate potential impacts on surface water resources.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and an assessment of environmental impacts.

RAI WR-3

Clarify whether Baker Spring water chemistry data analyzed to date have a chemical fingerprint associated with Gatuña Formation/Pecos Valley Alluvium groundwater, with Antlers Formation groundwater, or with meteoric surface water. Clarify the nature of two groundwater springs located near the proposed CISF:

- Is Baker Spring a groundwater-sourced spring, or is its name a misnomer because it only contains rainwater runoff?
- Identify the groundwater source (i.e., the formal hydrogeologic unit/geologic formation) of an unnamed groundwater spring located 4.8 km [3 mi] east of ISP (see ER page 3-21) and identify the location of this spring relative to the proposed CISF on a map.

Baker Spring is described variously in literature as either a seasonally intermittent surface water feature sourced by rainfall (e.g., ISP's description at ER page 3-18) or as a Gatuña Formation groundwater-sourced spring (e.g., page 17 of Lehman and Rainwater, 2000). Updated surface water characterization information about Baker Spring and the other local spring are needed to describe the affected environment and to assess the potential environmental impacts to surface water and groundwater near the CISF.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and an assessment of environmental impacts.

RAI WR-4

Clarify ER descriptions of site topography, water-balance parameters, surface water basins, and hydrogeologic characteristics at the proposed CISF by:

- Clarifying whether the statement on ER, page 3-19, that the proposed CISF is "located on a southwest-facing slope that transitions from the Southern High Plains to the Pecos Valley physiographic section" refers to the topographic slope upon which permitted WCS Low-Level Radioactive Waste (LLRW) facilities were constructed, or the location and natural slopes of the proposed CISF site, or to both (ER description appears vestigial from LLRW application-type documents, and therefore, possibly inaccurate relative to the proposed CISF site location).
- Clarifying whether or not the proposed CISF is located directly above a relatively flat-lying, local topographic high point above the Red Bed Ridge surface water/groundwater divide, whereas the existing WCS LLRW facility lies on a southwest-facing, lower elevation slope of the Red Bed Ridge, on the Rio Grande River

Basin side of the surface water/groundwater divide. (ER description appears vestigial from LLRW application-type documents, and therefore, possibly inaccurate relative to the proposed CISF site location).

- Clarifying whether or not the proposed CISF is located entirely within the Rio Grande River Basin), which is separate from the adjacent Colorado River Basin, and whether or not the northwestern corner of the proposed CISF site is located at the river basin boundary.
- Providing a topographic map that illustrates the specific location of the surface water drainage divide between the Rio Grande and Colorado basins relative to the location of the proposed CISF at a scale that is commensurate with the scale of the ISP/WCS property.
- Clarifying site water-balance parameters; the ER states that infiltration and evapotranspiration would mitigate a significant amount of the potential runoff volume from the CISF site; quantify what is meant by the word “significant” and the other parameters of the site water-balance equation (i.e., evapotranspiration, runoff, storage, and infiltration/recharge).
- Clarifying planned usage of new or existing water-retention basins, if any, that would support CISF-construction, -operations, and -decommissioning activities.
- Clarifying planned or expected storm-water management facilities or activities.
- Clarifying whether or not local Gatuña Formation groundwater occurs within the Rio Grande River Basin (and not within the Colorado River Basin).
- Clarifying whether or not local Ogallala Formation groundwater occurs within the Colorado River Basin (and not within the Rio Grande River Basin).

Clarified topographic information, site water-balance information, descriptions of any planned usage of new or existing manmade surface water bodies, and hydrostratigraphic information for the units present immediately beneath the proposed CISF site is needed to assess potential environmental impacts to surface water and near-surface groundwater at the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and an assessment of environmental impacts.

RAI WR-5

Further, describe the groundwater environment underlying and near the proposed CISF by identifying:

- The groundwater source (i.e., the formal hydrogeologic unit) that supplies the nearest downgradient potable water well at the Letter B Ranch and the location of this well on a map relative to the proposed CISF.
- All windmill-pumped groundwater wells located on and within an 8-km [5-mi] radius of the ISP/WCS property that historically pumped near-surface groundwater. Illustrate the

locations of these wells relative to the proposed CISF on a map, and interpret site information to identify on the map whether each well was screened in the Ogallala, Antlers, or Gatuña Formations.

- All active, industrial groundwater wells located on the ISP/WCS property that provide non-potable water for a firewater tank, processing activities, dust suppression, or any other industrial use; show all such ISP/WCS well locations on a map and provide well-perforation depths. Identify the aquifer formation(s) of the non-potable water pumped from these wells (give specific formation names, such as Trujillo or Santa Rosa Formations; “Dockum Aquifer” is not sufficiently specific). Provide, per hydrostratigraphic unit, the annualized volume of non-potable groundwater now in use for ongoing activities at WCS, estimate any anticipated future changes to the annualized volume of non-potable water that will be consumed for non-CISF activities, and estimate the additional annualized volume of non-potable water per aquifer that ISP would use exclusively in activities associated with construction and operation of the CISF during its various phases. Clearly identify which proposed CISF-related activities would require use of site industrial groundwater, and how CISF buildout phase would affect consumptive use.
- The number of boreholes/wells/piezometers drilled and completed beneath the proposed CISF footprint into the upper unit of the Dockum Aquifer, which may provide information about the occurrence and lateral continuity of saturated sand that occurs as lenses within the Cooper Canyon Formation/Red Bed Ridge clay unit. Provide hydrogeologic information available to ISP that would clarify the location of saturated sands beneath the proposed CISF potentially occurring within the Cooper Canyon Formation.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the affected environment and an assessment of environmental impacts, including cumulative impacts, and (b)(5), any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

RAI WR-6

Provide an ISP CISF site-specific hydrostratigraphic column to clarify the composition of the local hydrostratigraphic units underlying the proposed CISF site, which have a much simpler configuration than what is shown in the regional stratigraphic column of Safety Analysis Report (SAR) Figure 2-13.

The regional stratigraphic column illustrated in SAR Figure 2-13 is too complicated (it shows units that are not present at ISP-WCS) and does not clearly describe the local subsurface geologic situation at the CISF. More simplified and accurate visual information is needed to clearly describe and communicate the affected groundwater and vadose zone environments at the proposed CISF, and to facilitate assessments of the potential environmental impacts of CISF construction, operation, and decommissioning.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the affected environment and an assessment of environmental impacts.

RAI WR-7

Provide isopach maps for the tops of hydrogeologic units beneath the proposed CISF site, including isopach maps for the tops of all formally named formations and for the tops of water-bearing sand lenses occurring within the Cooper Canyon Formation.

Additional information about the depths to the tops of the local hydrogeologic units at the CISF site is needed to compare with potentiometric surface maps of hydraulic head and to accurately describe the affected groundwater and vadose zone environments at the proposed CISF to support the assessment of the potential environmental impacts of CISF construction and operation.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the affected environment and an assessment of environmental impacts.

RAI WR-8

Provide geologic formation names instead of generic material labels on updates to SAR Figures 2-16 and 2-17 (i.e., geologic cross-sections). The affected groundwater environment must be clearly described.

The CISF is located at or near a surface water/groundwater basin divide, where three near-surface geologic units have discrete interfaces within relatively short distances (i.e., Ogallala Formation, Antlers Formation, and Gatuña Formation). For the adjacent LLRW site, Lehman and Rainwater (2000) clearly indicated what units lay beneath the proposed facility. In contrast, SAR Figures 2-16 and 2-17 only provide generic material type labels on the geologic cross-sections for the proposed CISF, and are, therefore, not explicit about which formations underlie the proposed facility. The proposed CISF would be located above regionally extensive, formally named geologic units having characteristics that are well-described in the literature. Additional information is needed about which hydrogeologic formations underlie the CISF site to accurately describe the affected groundwater and vadose zone environments at the proposed CISF and support assessment of the potential environmental impacts of CISF construction, operation, and decommissioning.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the affected environment and an assessment of environmental impacts.

RAI WR-9

Quantify the annualized volume of potable groundwater now in use for ongoing activities at WCS, estimate any anticipated future changes to the annualized volume of potable groundwater consumed for non-CISF activities, and estimate the additional annualized volume of potable groundwater that ISP will use exclusively to construct and operate the CISF during its various lifecycle stages and development phases.

ER Section 4.4 states that during construction and operation of the proposed CISF, potable water will be supplied by the existing potable water system that serves the WCS facility. Additional information is needed to support assessment of the environmental impacts that ISP's

CISF potable groundwater consumptive use will have on groundwater resources and cumulative impacts.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include descriptions of the proposed action, the affected environment, and the impacts of the proposed action, including cumulative impacts.

RAI WR-10

Provide groundwater unit information that corresponds with the water quality data provided in the application to support the ER. ISP should clearly identify the names of the individual hydrogeologic formations that are associated with the groundwater quality described in ER Sections 3.4.14.1 and 3.4.14.5.

ER Sections 3.4.14.1 and 3.4.14.5 use terminology [e.g., 55 m and 69 m (180 ft and 225 ft) zones] that is not defined in the ER. Additional information about which geochemical data are associated with the sampled groundwater formations (e.g., Gatuña, Antlers, Ogallala, Cooper Canyon, Santa Rosa, and or Trujillo) is needed to support assessment of the potential environmental impacts to groundwater quality at or near the proposed CISF. Please provide a map that spatially indicates where geochemical samples were acquired from wells/boreholes, relative to the footprint of the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(b), which requires that the ER include a description of the affected environment.

RAI WR-11

Identify the shallowest groundwater located beneath the proposed CISF footprint by name and depth below the CISF land surface, whether in the Antlers, Ogallala, Gatuña, or Cooper Canyon Formation. In future documentation associated with the proposed action, name the specific aquifers in the Dockum Group that are discussed, whether the Cooper Canyon, Trujillo, or Santa Rosa Formations. In response to this RAI, use of the lumped term “Dockum Aquifer” should be avoided because it applies to the entire thick sequence of the Dockum Group (to both aquifers and aquitards) and does not clearly denote the site-specific aquifer that is being referenced at the proposed CISF. ISP’s license application should also call out by name the near-surface groundwater formations (Antlers, Ogallala, or Gatuña) that are referred to in any related text or that are associated with any data provided.

In response to RSI 9.6, the applicant indicated, “The...nearest aquifer is located at a depth of 245 to 305 m [800 to 1,000 ft] below ground surface.” The response to RSI 9.6 does not indicate by name a hydrogeologic formation associated with this aquifer. The applicant should clarify if they are referring to a water-bearing sandy zone within the Cooper Canyon Formation or to another aquifer deeper in the Dockum Group. Also in response to RSI 9.6, the applicant indicated that “(t)he WCS site is separated from that [unspecified nearest] aquifer by the Dockum Formation, consisting of low permeability clays (10^{-9} cm/s).” The applicant should clarify whether it meant, “separated from that aquifer by the Cooper Canyon Formation,” given that the Dockum Group contains two aquifers at the ISP/WCS property located below the Cooper Canyon Formation, as well as additional water-bearing sandy zones within the otherwise clayey Cooper Canyon Formation.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the affected environment and an assessment of environmental impacts.

ECOLOGY (ECO)

RAI ECO-1

Provide updated ecological studies for the proposed CISF and associated rail siding in Texas and New Mexico, if available, and provide an estimated timeframe when the updated ecological studies will be available. Provide written documentation in response to Texas Commission on Environmental Quality (TCEQ) license conditions.

Ecological studies at the WCS site were conducted during 1996, 1997, 2004, and 2006. Some of these surveys covered the entire proposed CISF area while others covered only a portion of the proposed CISF area; however, due to the age of these surveys and the natural changes of plants and animals over time, the presence or absence of State and Federal species of concern, including threatened and endangered species, should be confirmed. The NRC staff understands that it takes more than one growing and breeding season to conduct baseline ecological surveys.

The NRC staff's review of WCS's Radioactive Material License R04100, Amendment No. 31 (October 2017) suggests that updated written documentation from the U.S. Fish and Wild Service (USFWS) and the Texas Parks & Wildfire Department (TPWD) may be available as a result of License Condition #160, which states "The Licensee must provide to the executive director every five (5) years written documentation from the Texas Parks and Wildlife Department and the United States Fish and Wildlife Service regarding the presence of threatened or endangered species occurring near the site." In addition, License Condition #161 noted in WCS's Radioactive Material License Amendment No. 12 from 2012 stated, "The Licensee must recognize Baker Spring as a perennial water body and conduct appropriate aquatic surveys to establish baseline conditions and to identify the supported species, including aquatic and benthic invertebrates." Specifically, the additional information requested regarding ecological studies conducted after 2006 and baseline ecological studies and surveys previously conducted for Baker Spring is needed to describe the most recently observed ecological characteristics at and around the proposed CISF, and to evaluate potential impacts on ecological resources, including sensitive species.

This additional information is needed in accordance with 10 CFR 51.45(b)(1) and (2), which require that the ER discuss the impacts and adverse effects of the proposed action, and the Endangered Species Act.

AIR QUALITY (AQ)

RAI AQ-1

Supplement the existing description of applicable air permits to address the following:

- Whether the TCEQ permit would be a new permit or a modification of the existing WCS site permit

- Whether the New Mexico Environment Department air permitting requirements could apply to the proposed action (specifically, construction of the rail side track).

ER Section 1.3.2.3 states that ISP would obtain from the TCEQ any required air permits to support construction and operation of the proposed action. However, the ER is unclear whether this would be a new permit or a modification to the existing WCS site air permit. In addition, it is unclear whether some of the railroad side track construction occurs in New Mexico (see RAI PA-2); however, the ER does not provide information about air permitting associated with the New Mexico Environment Department. Specifically, this information is needed to support the NRC staff's description and evaluation of applicable statutory, regulatory, and permitting requirements in the NRC's EIS.

This information is needed in accordance with 10 CFR 51.45(d), which requires that the ER include a description of the status of compliance with applicable environmental quality standards and requirements, including limitations and requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection.

RAI AQ-2

Provide either summarized onsite meteorological data (e.g., yearly, seasonally, monthly) or provide the data in Attachment A of the SAR Chapter 2 in a spreadsheet rather than a PDF file.

Attachment A of the SAR Chapter 2 (a PDF file about 5,000 pages long) contains the hourly data from four onsite meteorological stations over a 6 year period from 2010 to 2015. However, summary information for the onsite meteorological stations is limited to wind speed and direction averaged over a 5 year period (see ER Section 3.6.4). Onsite meteorological data supports the general description of the affected environment, and any inclusion of this data in the EIS would be in summary form. Specifically, additional information on the onsite meteorological data is needed to support NRC's description of the proposed action and the affected environment in the EIS.

This information is needed in accordance with 10 CFR 51.45(b), which requires that the ER include a description of the affected environment.

RAI AQ-3

Supplement the regional characterization of the annual air emissions by:

- Expanding the current emission estimates in ER Table 3.6-8 to include (i) particulate matter PM₁₀ and non-radiological hazardous air pollutants emission estimates and (ii) emissions data from New Mexico where some of the proposed action activities might occur.
- Addressing future estimated regional emissions over the 40-year timeframe of the proposed action (e.g., how the current emission estimates in ER Table 3.6-8 are expected to change over time).
- If available, addressing both current and future air emissions from the existing WCS site activities.

ER Table 3.6-8 provides current annual emissions for some criteria pollutants for Andrews County and the State of Texas. However, this table does not include estimates for particulate matter PM₁₀ or non-radiological hazardous air pollutants. Also, this table does not include emission estimates from New Mexico, where a portion of the proposed action's activities, the construction of the CISF railroad side track, might occur (see RAI PA-2). Finally, ER Table 3.6-8 only presents a snapshot of current conditions and does not address regional emissions over the 40-year lifetime of the proposed action. Specifically, the regional annual air emissions are needed, including key air emissions (e.g., particulate matter PM₁₀), to support the NRC staff's characterization of the environment where the proposed action's activities occur over the lifetime of the proposed action. The ER does not provide the air emission generated by the existing WCS facilities, which are located in close proximity to the proposed CISF site.

This information is needed in accordance with 10 CFR 51.45(b), which requires that the ER include a description of the affected environment.

RAI AQ-4

Characterize the potential air emissions based on the entire range of the proposed action's emission sources. Consideration should be given, but not limited, to the following:

- Combustion emissions from mobile sources, including onsite, local, and national (i.e., SNF) transportation.
- Combustion emissions from cross-country transport of precast concrete pieces to the proposed site if an onsite concrete batch plant is not used.
- Emissions from the railroad side track construction, if not already included.

ER Section 1.3.2.3 indicates that mobile sources (e.g., train, heavy haul trucks, transporters, and private vehicles) were not included as part of the air quality impact analyses because these sources are not regulated by TCEQ.

ER Section 2.2.2.6 states that if an onsite concrete batch plant is not constructed, then precast concrete pieces will be transported cross country to the proposed WCS site. Potential emissions from this activity were not included in the ER analyses.

ER Section 3.2.3 states that a railroad side track will be constructed. It is unclear if emissions from this activity were included in the project emission estimates described in ER Section 4.2.1. This information is needed to accurately characterize the entire range of emission sources and project emissions from the proposed action in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(b), which requires that the ER include a description of the proposed action and its potential impacts on the environment.

RAI AQ-5

Characterize the peak year emission levels. Consideration should be given, but not limited, to the following:

- Overlap of the various stages (i.e., construction, operation, and decommissioning) within the framework of the planned eight phases.
- Distinctions in construction emission levels between Phase 1 and subsequent phases.
- Individual pollutants other than just particulate matter (e.g., other criteria pollutants, volatile organic compounds, non-radiological hazardous air pollutants) because the peak year for particulate matter could be different than the peak year for other pollutants.
- Complete range of emission sources and activities associated with the proposed action (see RAI AQ-4).
- Provide estimated emission levels (e.g., tons per year) for the activities and sources associated with the proposed CISF accounting for the various topics raised in the previous bullet points specified in this RAI (i.e., individual stages, overlapping of stages and phases, pollutants other than particulate matter PM₁₀, range of emission levels) or provide a basis for not providing any aspects of this information.

ER Section 1.3.2.3 identifies that both the construction and the operation activities generate air emissions. ER Section 4.5.3 states that the CISF could be built in eight phases and indicates that this phased approach means that construction and operation activities could overlap at times. ER Section 4.5.3 also indicates that the first phase would also include site infrastructure construction (e.g., facilities, the railroad side track, possibly a new concrete batch plant). The air impact analysis in ER Section 4.6 (i) does not clearly identify the proposed action's highest annual or peak year emissions considering the possible overlap of stages (i.e., construction, operation, and decommissioning) or phases as well as the distinction in construction emission levels between Phase 1 and the subsequent phases, (ii) only considers particulate matter, (iii) does not consider combustion emissions from mobile sources, and (iv) only provides estimated annual emission levels for the concrete batch plant (note that these emission level estimates in ER Table 4.6.2 do not specify units). The EIS analyses need to consider the peak year emission levels since this relates to the largest potential impacts from the proposed action.

This information is needed in accordance with 10 CFR 51.45(b)(1), which requires that the ER include a description of the proposed action and its potential impacts on the environment.

RAI AQ-6

Provide a greater level of detail for the site-specific air dispersion modeling. Examples of additional information to provide include, but are not limited to, the following:

- Estimated emission levels for the various pollutants generated by the proposed CISF activities that were used as input for the air dispersion modeling.
- Details about the emission inventory assumptions, inputs, and calculations (e.g., types and number of emission sources, horsepower, load factors, and emission factors).

- Baseline ambient air concentrations.
- Air dispersion modeling results, which allow for comparison to the various National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) thresholds.
- Basis for why the air dispersion modeling did not include (i) pollutants other than particulate matter PM₁₀, and (ii) sources other than fugitive dust from construction.
- Identify who conducted the air dispersion modeling and when it was conducted.

ER Sections 4.2.1 and 4.6 state that air dispersion modeling was conducted to assess impacts of the proposed CISF. However, information in the ER concerning the modeling input is limited and did not include the emission inventory used as input for the modeling. ER Section 4.6 stated that construction stage particulate matter PM₁₀ emission were below the NAAQS. However, the analyses in the ER did not (i) provide the actual modeling results, (ii) compare the results to PSD thresholds, (iii) provide baseline ambient pollutant concentrations for inclusion in the NAAQS assessment, or (iv) explain why the air dispersion modeling was limited to the particulate matter PM₁₀ emissions from fugitive dust from the construction stage. The requested detailed information provides a basis for characterizing the quality of the air dispersion modeling results.

This information is needed in accordance with 10 CFR 51.45(c), which requires that the ER include sufficient data to aid the NRC in its development of an independent analysis.

RAI AQ-7

Revise the air quality impact analyses as appropriate to address the following:

- The entire range of emission sources associated with the proposed action as described in RAI AQ-4.
- The peak year emission levels as described in RAI AQ-5.
- Pollutants other than particulate matter PM₁₀ (e.g., other criteria pollutants, volatile organic compounds, non-radiological hazardous pollutants).

ER Section 1.3.2.3 identifies two primary types of air emissions associated with the proposed action: combustion emissions from construction equipment and fugitive dust from excavation activities and construction equipment. However, the air quality impact analyses in ER Section 4.6 is limited to fugitive dust. The EIS impact analyses need to consider the entire range of emission sources (see RAI AQ-4), the peak year emission levels (see RAI AQ-5), as well as the entire range of pollutants generated by the proposed CISF to accurately characterize the air quality impacts. If additional air dispersion modeling is conducted in response to this RAI, consideration should be given to the information requests in RAI AQ-6 associated with the existing air dispersion modeling.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the proposed action and discuss the impacts of the proposed action.

RAI AQ-8

Provide a technical basis for the assumption of a 50-percent reduction in emissions from dust suppression, given that various factors influencing the level of dust suppression activities are yet to be determined (e.g., identifying the specific mitigation measures that would be implemented). If a different efficiency value is warranted, then specify the value, provide a basis, and revise the emission inventory and impact analyses accordingly.

ER Section 4.6 states that the air emission inventory used for assessing impacts assumes a 50-percent reduction in fugitive dust emissions for dust suppression activities. However, the ER does not identify the actual, specific mitigation measure that would be implemented or the basis for the using this 50 percent value. Other ER text identifies several factors that influence the level of dust suppression activities: water conservation (see ER Section 4.2.3), possible requirements from an air permit, which has not yet been obtained (see ER Section 1.3.2.3), and implementation of a Best Management Emission Control Plan, which has not yet been developed (see ER Section 1.3.2.3). Providing a basis for the effectiveness of the dust suppression mitigation allows for an accurate characterization of the air emissions and associated impacts.

This additional information is needed in accordance with 10 CFR 51.45(c), which requires that the ER include sufficient data to aid the NRC in its development of an independent analysis.

CLIMATE CHANGE (CC)

RAI CC-1

Address the following aspects of climate change and the proposed action's greenhouse gas emissions:

- Describe any relevant regional, state, or local goals or laws that address climate change.
- Characterize the proposed action's greenhouse gas emission levels from stationary, mobile (e.g., onsite, local, and national), and indirect sources.
- Disclose whether any mitigation, project design, or adaptation measures will be implemented to address greenhouse gas emissions from the proposed action.
- Describe any areas where the environmental impacts of climate change overlap with the environmental impacts of the proposed action (e.g., water usage and availability).

The discussion of greenhouse gas emissions is limited to text in ER Section 8.5, citing NUREG-2157, and states that the proposed action's emission would be small but would add to the overall atmospheric burden of emissions that could contribute to potential long term impacts (NRC, 2014). The EIS needs to address the project's greenhouse gas emissions and the potential overlap of environmental impacts from climate change and the storage of SNF at the WCS site.

This additional information is needed in accordance with 10 CFR 51.45(b) through (d), which require that the ER include: a description of the proposed action and the environment affected; a discussion of the impacts of the proposed action; sufficient data to aid the NRC in its

development of an independent analysis; and a description of the status of compliance with applicable environmental quality standards and requirements, including limitations and requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection.

NOISE (NOI)

RAI NOI-1

Provide current information on measured background or ambient noise levels at the proposed CISF.

ER Sections 3.7.1 and 4.7.3 provide information on background noise levels at the neighboring URENCO facility measured in September 2003. In ER Section 4.7.3, ISP assumes that the measured September 2003 background noise levels at URENCO would be similar to current background noise levels at the proposed ISP CISF. Current site-specific information on background noise levels is necessary to describe the affected environment and establish background/ambient (baseline) conditions of the site so that the NRC staff can evaluate the impacts of construction and operation of the proposed CISF.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which require that the ER include a description of the affected environment and a discussion of the impacts of the proposed action.

RAI NOI-2

Provide estimates of peak noise levels that would be generated during construction and operation of the proposed CISF, for example, estimates of peak noise levels generated by vehicular and rail traffic, construction and operational equipment, and ancillary activities such as operation of the concrete batch plant.

ER Section 4.7.1 concludes that, “(p)redicted noise levels, background noise levels, calculated construction noise levels, and operational noise levels should typically be well below both HUD and Environmental Protection Agency (EPA) guidelines.” However, the ER should estimate peak noise levels that would be generated during construction and operation of the proposed CISF to support this conclusion. Estimates of peak noise levels generated during construction and operation are needed to support the NRC staff’s evaluation of potential noise impacts to offsite and on-site receptors.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and a discussion of the impacts of the proposed action.

RAI NOI-3

Provide information on peak noise to workers during construction and operation of the proposed CISF. This information should include:

- Estimated peak noise levels that workers would be exposed to.

- Comparison of estimated peak noise levels to workers with Occupational Safety and Health Administration (OSHA) regulatory limits.
- Mitigation measures that would be implemented to reduce noise levels to workers.

The ER should assess the environmental impacts of noise to workers during construction and operation of the proposed CISF. Specifically, estimates of peak noise levels that workers will experience during construction and operation of the proposed CISF are needed to support the NRC staff's evaluation of noise impacts to onsite receptors.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and a discussion of the impacts of the proposed action.

CULTURAL AND HISTORIC RESOURCES (CHR)

RAI CHR-1

Clarify whether additional historic and cultural resources identification work, surveys, and Federal, State, or Tribal agency coordination will be needed prior to construction and operation of the proposed CISF because of construction activities potentially extending into New Mexico. If so, provide a description of the identification work, surveys, and agency coordination that would need to be completed and an anticipated schedule.

In response to its review of ISP's archeological survey of the proposed CISF site, the New Mexico State Historic Preservation Officer (NM SHPO) stated, "The SHPO concurs that no additional cultural resources identification efforts are needed for this undertaking with the condition that all new ground-disturbing and construction activities are confined to Texas. If, however, any construction related ground disturbances such as staging areas, equipment or materials storage yards, or access roads are needed in New Mexico, then a cultural resource survey will be required to identify and evaluate historic properties in the area of potential effects." (see ER Appendix A, Attachment 3-3). Figures in the ER and SAR show that the railroad side track to be built as part of the proposed CISF would extend into New Mexico (e.g., ER Figures 3.3-1, 3.6-1, 4.5-1, 4.12-1, and 6.1-1 and SAR Figures 1-1, 1-2, and 2-1). Therefore, the route of the railroad side track would result in new ground-disturbing and construction activities in New Mexico. Specifically, the requested information is needed to support the NRC staff's evaluation of applicable agency coordination and consultation requirements and complete the NRC staff's description of the affected environment and assessment of environmental impacts on cultural and historic resources in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(b) and (d), which require that the ER include a description of the affected environment and a description of the status of compliance with applicable environmental quality standards and requirements, including limitations and requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection.

RAI CHR-2

Provide a copy (electronic or website link) of the draft report or final report, if prepared, for the archeological survey conducted in May 2015 to inventory and evaluate archeological resources within the footprint of the proposed CISF.

ER Section 3.8.2 states that, "In May 2015, a pedestrian archeological survey was completed in order to inventory and evaluate archeological resources on private land within the footprint of the proposed spent nuclear fuel CISF at the existing Waste Control Specialists waste disposal facility in western Andrews County, Texas." Information in ER Appendix A and D, indicates that the draft report for this survey entitled, "Intensive Archeological Survey of the Proposed Waste Control Specialists Spent Nuclear Fuel Consolidated Interim Storage Facility, Andrews County, Texas," was submitted for review to the Texas Historical Commission (THC) on July 2, 2015. The requested information is needed to support the NRC staff's description of the affected environment and assessment of environmental impacts on cultural and historic resources in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(b) and (b)(1), which requires that the ER include a description of the affected environment and a discussion of the impacts of the proposed action.

SOCIOECONOMICS (SOC)

RAI SOC-1

Provide tax revenue information on a county and state level over a 40-year period.

Appendix A of the ER provides estimated employee compensation and regional tax impacts of the proposed CISF between 2019 and 2028. The iMPact analysis for PLANning (IMPLAN) model was run for a period of 20 years; however, ISP is requesting a license for a term of 40 years. This additional information is needed to evaluate the potential socioeconomic impacts on the states and the counties within the region during the requested license period.

This information is needed in accordance with 10 CFR 51.45(b)(1), which requires that the ER include a description of the impacts of the proposed action.

PUBLIC AND OCCUPATIONAL HEALTH (POH)

RAI POH-1

Provide a map or figure showing monitoring locations for background radiation levels.

ER Section 3.11.1.1 (Background Radiation Levels at the CISF) provides monitoring results in Table 3.11-1, but should also include a figure showing the monitoring locations. Monitoring results should include information about the locations where the monitoring occurred. The requested information would allow the NRC staff to evaluate the applicability of measurements to the proposed CISF location.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI POH-2

Provide a map or figure of monitoring locations for historical exposures to radioactive materials.

ER Section 3.11.1.3 (Historical Exposure to Radioactive Materials at WCS) provides a table of monitoring results but should also include a map figure showing the monitoring locations. Monitoring results should include information about the locations where the monitoring occurred. The requested information would allow the NRC staff to evaluate the applicability of measurements to the proposed CISF location.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

WASTE MANAGEMENT (WM)

RAI WM-1

Provide generated waste volume estimates by waste type and facility lifecycle phase.

ER Section 3.12 (Waste Management) describes the wastes expected to be generated by the proposed action, including liquid (nonradioactive wastewater; sanitary) and solid waste (low-level radioactive waste, nonhazardous solid waste, hazardous waste). These descriptions do not provide information by lifecycle stage (i.e., construction, operations, decommissioning) and the expected volume of each waste that would be generated is not quantified. Volume estimates should be provided for any solid wastes that could be generated in larger than negligible quantities, for example:

- *Annual and cumulative volumes of nonhazardous solid waste that would be generated from the fabrication of 3,200 storage systems over 20 years (ER Section 3.12.1.3)*
- *Annual and cumulative volume of nonhazardous solid waste that would be generated during decommissioning*

The requested information will allow the NRC staff to evaluate the magnitude of potential waste management impacts for each proposed facility lifecycle stage. This includes impacts of waste generation on available capacity and operational life of disposal facilities.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI WM-2

Provide additional information about the local municipal landfill and the WCS LLRW disposal facility, including the available capacity, annual disposed volume of waste, and currently projected operational life of these facilities.

ER Sections 3.12.1.3 (Solid Wastes) and 3.12.1.3.1 (Solid Low-Level Radioactive Waste) describe that nonhazardous solid waste and Low-Level Radioactive Waste (LLRW) would be disposed at a municipal landfill and the adjacent WCS LLRW facility, respectively, but provides no description of characteristics of these facilities. The characteristics of affected disposal

facilities such as available capacity, annual disposed volume, and operational life will allow the NRC staff to evaluate the impacts of proposed waste generation on these facilities.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI WM-3

Clarify which NRC Regulatory Guide applicable to release of waste materials for disposal the application relies on.

ER Section 3.12.1.3.2 (Non-Radioactive Solid Waste) references NRC Regulatory Guide 1.86 for limits applicable to releasing waste materials for disposal. NRC Regulatory Guide 1.86 has been retired, but similar limits are referenced in Regulatory Guide 8.30. The commitments to follow NRC guidance in the application should reflect the currently applicable guidance.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

RAI WM-4

ISP should clarify ER statements about whether hazardous waste would be generated by the proposed action.

ER Section 1.3.2.4 (Pollution Prevention and Waste Management) states that small quantities of hazardous wastes would be generated and are expected to be much less than 100 kg in a month. This information appears to conflict with the statement in ER Section 3.12.1.3 (Solid Wastes) that indicates mixed and hazardous waste is not expected to be generated at the CISF. If hazardous waste is generated by the proposed action, ISP should clarify if the hazardous waste would be disposed at the adjacent WCS Resource Conservation and Recovery Act (RCRA) facility.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

CUMULATIVE IMPACTS (CI)

RAI CI-1

Identify and describe past, present, and reasonably foreseeable future actions that may result in a potential for cumulative environmental impacts within an 80-km [50-mi] radius of the proposed CISF.

ER Section 2.6 provides a description of present actions within a 48-km [30-mi] radius of the proposed CISF that have a potential for cumulative environmental impacts. However, other past, present, and reasonably foreseeable future actions within and outside an 80-km [50-mi] radius of the proposed CISF have the potential for cumulative environmental impacts. For example, oil and gas development and production activities, livestock grazing, renewable energy projects (e.g., wind and solar farms), and a number of reasonably foreseeable future actions (e.g., the proposed Eddy Lea Energy Alliance/Holtec CISF, the Ochoa Potash Mine Project, and the DK Disposal E & P Landfill and Processing Facility) all have the potential for

cumulative environmental impacts. The requested information is needed to support the NRC staff's evaluation of cumulative impacts in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(c), which requires that the ER contain an analysis of cumulative impacts that may result from the proposed action.

RAI CI-2

Provide additional information to support the analysis of cumulative impacts of both nuclear and non-nuclear past, present, and reasonably foreseeable future activities for all resource areas.

The analysis of cumulative impacts presented in ER Section 2.6 is limited to brief statements regarding (i) air quality attributable to expansion of the WCS-Controlled Compact Waste Facility and Federal Waste Facility, operations at Permian Basin Materials, and manufacture of concrete at WCS's existing concrete batch plant; (ii) competition for and use of aggregate, crushed rock, and other mineral resources; and (iii) radiological doses attributable to the nearby URENCO USA uranium enrichment facility and WCS's low-level radioactive waste disposal facilities. To support the NRC staff's analysis of the potential cumulative impacts of the proposed action, address potential cumulative impacts relevant to all resource areas, including an evaluation with supporting information of the environmental impacts of nuclear activities (e.g., URENCO USA, WCS's low-level radioactive waste facilities, and the proposed Eddy Lea Energy Alliance/Holtec CISF) and non-nuclear activities (e.g., oil and gas exploration and development, potash mining, and livestock grazing) within an 80-km [50-mi] radius of the proposed CISF. The requested information is needed to support the NRC staff's evaluation of cumulative impacts in the EIS.

This additional information is needed in accordance with 10 CFR 51.45(c), which requires that the ERs contain an analysis of cumulative impacts that may result from the proposed action.

ENVIRONMENTAL MEASURES AND MONITORING (EMM)

RAI EMM-1

Provide additional information on the proposed pre-operational and operational Radiological Monitoring Program for the proposed CISF. The additional information should include:

- Media or effluents to be sampled.
- Number and location of sample collection points, including distal control sample collection points.
- Radiological measuring devices or methods of analysis and the radiological constituents to be analyzed, including lower limits of detection.
- Procedures/protocols for sample collection (e.g., sample size, sample collection frequency, and sampling duration), handling, preservation, and transport.
- Discussion that justifies the choice of sample locations, analyses, frequencies, duration, sizes, and lower limits of detection.

ER Section 6.3 provides a limited discussion and few details about the pre-operational and operational Radiological Monitoring Program for the proposed CISF. Specifically, the additional information is needed to support the NRC staff's description of the applicant's pre-operational and operational Radiological Monitoring Program and the NRC staff's environmental evaluation of the adequacy of radiological monitoring activities for the proposed CISF to demonstrate compliance with the requirements in 10 CFR 72.104 (Criteria for radionuclide material in effluents and direct radiation from an ISFSI or MRS).

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

COST-BENEFIT (CB)

RAI CB-1

Revise the quantitative cost and benefit estimates in ER Chapter 7 to include discounting and provide details and assumptions (e.g., a project schedule by year specifying when activities occur) or provide a basis for not doing so for any of the cost factors.

Discounting was not used for any of the estimated costs and benefits of the proposed action and no-action alternative presented in ER Chapter 7. ER Section 7.2.1 explains that discounting was not used because ISFSI operations include substantial labor, technological, and regulatory compliance expenditures, and it was assumed that these expenses remain relatively constant. The justification for not discounting appears to focus only on ISFSI operational costs associated with the eliminated storage costs presented in ER Section 7.2.1. However, this only represents one of the three key cost factors presented in the analysis and the nature of the other two costs is somewhat different than the ISFSI operation cost. The cost for the development of the CISF and relocation of SNF described in ER Section 7.3 includes significant capital and infrastructure costs (see ER Table 7.4-2). The cost-benefit analysis for the repurposed land in ER Section 7.2.2 accounts for the future estimated value of the land at decommissioned nuclear-purposed land once the license is terminated (see ER Table 7.2-6). The net benefit calculation in ER Section 7.4.1 uses the undiscounted values from all three of these key qualitative estimates. Discounting is appropriate when analyzing this proposed action because of the 40-year timeframe and the nature of some of the costs. Specifically, discounting the quantitative estimates is needed to support the description of the costs and benefits in the NRC's EIS. Discounting requires specifying the timing (i.e., the specific years) in which activities occur. Key "high dollar" activities include the construction, operation, and decommissioning of the CISF as well as the SNF transportation. The details and assumptions associated with the calculation (e.g., a project schedule by year specifying when activities occur) are needed to support NRC's staff's understanding of how the discounting calculations were performed and for evaluation of cost and benefits of the proposed action and no action alternative.

The requested information is needed in accordance with 10 CFR 51.45(c), which requires that the ER include consideration of the benefits and costs of the proposed action and its alternatives as well as contain sufficient data to aid the NRC in its development of an independent analysis.

RAI CB-2

Clarify and supplement the SNF transportation schedule and associated assumptions as appropriate in the ER to

- Ensure the SNF transportation schedule and associated assumptions used for the cost benefit analysis are consistent with this information, as described in other parts of the ER or revise the analyses accordingly.
- To the extent it is known, provide greater detail for the assumptions for the shipment of SNF to the proposed CISF in future potential expansions of the CISF beyond the currently proposed 5000 MTU's *ER Section 7.2.1 describes that SNF transport occurs over a 31 year period. ER Section 4.2.7.1 states that the SNF would be transported over a 20 year period, assuming up to 200 canisters of SNF being transported to the CISF annually. The detailed assumptions for the SNF transport in ER Section 7.2.1 address the initial transportation at a greater level of detail than the potential future expansion (e.g., ER Table 7.2-3).*

This information is needed in accordance with 10 CFR 51.45(b) and 10 CFR 51.45(c), which require that the ER include a description of the proposed action and sufficient data to aid the NRC in its development of an independent analysis.

RAI CB-3

Provide additional information, supplement the calculation and associated assumptions for the total SNF storage costs presented in ER Table 7.2-2. This should include the following:

- Provide the detailed calculation and associated assumptions for the total SNF storage cost for both potential future expansions (all eight phases) and no action currently presented in ER Table 7.2-2.
- Supplement the current information in ER Table 7.2-2 to provide the cost estimates for implementing just phase 1 (i.e., the initial license request) and the detailed calculation and associated assumptions or provide a basis for not doing so.
- Supplement ER Table 7.2-2 to also include cost estimates, which assume no additional reactors are shutdown (i.e., use an annual cost of storing SNF for an operating reactor) and revise the cost benefit analyses in ER Chapter 7 accordingly or provide a basis for not doing so.
- Identify the reference for the statement in ER Section 7.2 that by 2053 there will be a total of 71 shutdown reactor sites in the United States according to NRC data (see AIN-1).

ER Table 7.2-2 contains the assumed total cost of storing SNF storage at the various generation sites over the 40 years (i.e., the proposed CISF 40-year license period) for both the full build out (i.e. all eight phases) (with a CISF) and no-action alternative (without a CISF). The difference between these two values is the avoided reimbursement cost. ER Section 7.2.1 provides a general description on how these values were calculated based on the transition of SNF from the current storage locations to the proposed ISP site. However, the ER does not

provide sufficient information for the NRC staff to determine exactly how the particular values in Table 7.2-2 (and the associated Figure 7.2-1) were calculated. ER Table 7.2-2 also does not provide the cost estimate information for just phase 1 (i.e., the initial license request).

ER Table 7.2-2 assumes an annual cost of storing SNF at each generation site based on this activity occurring at a shutdown reactor. NRC staff requests that this table be supplemented to also include estimates assuming an annual cost of storing SNF based on this activity occurring at an operating reactor (i.e., no additional reactors are shut down). Using an annual storage cost based on a value for an operating reactor could alter the estimated benefit as calculated in ER Table 7.2-2. NRC staff consider this an important component for characterizing the costs and benefits. As requested in this RAI for the current estimate in ER Table 7.2-2, provide the detailed calculation and associated assumptions for the calculation so NRC staff can follow exactly how these cost estimates were generated. Specifically, this additional information is needed to support NRC staff's description of the total cost for the proposed action and the no-action alternative in the NRC's EIS.

The requested information is needed in accordance with 10 CFR 51.45(c), which requires that the ER include consideration of the benefits and costs of the proposed action and its alternatives as well as contain sufficient data to aid the NRC in its development of an independent analysis.

RAI CB-4

Provide additional information, supplement the descriptions in ER Section 7.3 concerning the calculation, and associated assumptions for the costs of constructing, operating, and decommissioning the facility. This should include the following:

- Supplement the current information to provide the cost estimates for implementing just phase 1 (i.e., the initial license request) or provide a basis for not doing so.
- Clarify whether the staffing estimates in ER Table 7.3-10 represent the total number of employees supporting the ISP operations or only the additional new hires augmenting the existing WCS staff.

ER Section 7.3 explains that the costs for developing the proposed CISO, relocating the SNF to this facility, and operating the ISFSI incorporates the assumptions and cost estimates from a 2009 EPRI report (EPRI, 2009) and adjusts values, where appropriate, for the circumstances of the proposed CISO. However, the cost estimates in ER Section 7.3 appear to include future expansions (i.e. all eight phases) and do not include such estimates for just phase 1 (i.e., the initial license request). It is unclear whether the staffing estimates in Table 7.3-10 represent the total number of employees supporting the ISP operations or only the new employees augmenting the existing WCS staff. Specifically, this additional information is needed to support the NRC staff's description of the total cost for developing the proposed CISO, relocating the SNF to this facility, and operating this facility in the NRC's EIS.

The requested information is needed in accordance with 10 CFR 51.45(c), which requires that the ER include consideration of the benefits and costs of the proposed action and its alternatives as well as contain sufficient data to aid the NRC in its development of an independent analysis.

REFERENCED INFORMATION

RAI RI-1

Provide an electronic copy or active website link to the final version of WCS’s “Application for License to Authorize Near Surface Land Disposal of Low-Level Radioactive Waste” (dated 2007).

Citations in the ER indicate that relevant information and studies can be found in WCS’s “Application for License to Authorize Near Surface Land Disposal of Low-Level Radioactive Waste” (dated 2007). The requested information is needed to confirm information presented in the ER and to support NRC’s evaluation of environmental impacts in the EIS.

This information is needed in accordance with 10 CFR 51.45(c), which requires ERs to contain sufficient data to aid the NRC in its development of an independent analysis.

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