U.S. Nuclear Regulatory Commission Public Scoping Meeting

Environmental Impact Statement for Waste Control Specialist LLC's Proposed Consolidated Interim Storage Facility for Spent Nuclear Fuel Andrews County, Texas

> April 6, 2017 NRC Headquarters Rockville, MD



Protecting People and the Environment





Introduction, Public Scoping Meeting Objectives, and NRC's Roles and Responsibilities

Brian Smith, Deputy Director Division of Fuel Cycle Safety, Safeguards, and Environmental Review Office of Nuclear Material Safety and Safeguards (NMSS) U.S. Nuclear Regulatory Commission

Public Meeting Objectives



- Describe NRC's Roles and Responsibilities
- Describe NRC's Licensing Review / Environmental Impact Statement (EIS) Process
- Respond to Participant Questions
- Receive Public Comments on Appropriate Scope and Content of the EIS



The U.S. Nuclear Regulatory Commission: Mission and Regulatory Role

Cinthya Román, Chief

Environmental Review Branch Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission

The NRC and Its Mission



NRC Mission:

To license and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment.



The NRC Regulates:

• Nuclear reactors - commercial power, research and test; new designs



• **<u>Nuclear materials</u>** - reactor fuel; radioactive materials for medical, industrial, academic use



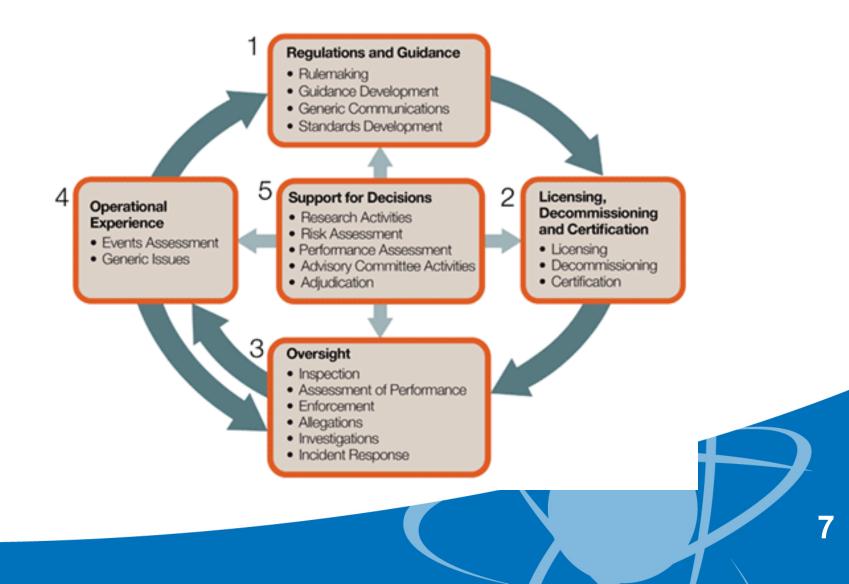
<u>Nuclear waste</u> – transportation; storage* and disposal; decommissioning of facilities



<u>Nuclear security</u> – physical security of nuclear material to protect it from sabotage or attacks

NRC's Primary Functions









What We Don't Do

- Promote or build nuclear facilities
- Own or operate nuclear power plants or other nuclear facilities
- Regulate nuclear weapons, military reactors, or space vehicle reactors
- Regulate naturally occurring radioactive material and radiation-producing machines





- NRC places a high priority on keeping the public and stakeholders informed
- NRC's Goals and Objectives:
 - Safety, Security, Openness, Effectiveness, and Operational Excellence
- Stakeholder participation in the regulatory process is solicited and encouraged
- NRC public Web site: <u>http://www.nrc.gov</u>

Open Communication



- Communication is key
- Active dialogue with stakeholders:
 You and other members of the public
 Public interest groups
 Native American Tribes
 - State and local officials
 - State agencies
 - Other Federal agencies
 - > Congress
 - Nuclear industry groups
 - International organizations

Why are we here?



- To solicit comments on the scope of the environmental review that the NRC is conducting.
- Environmental review required by National Environmental Policy Act (NEPA).
- NRC is preparing an Environmental Impact Statement (EIS) in accordance with NRC regulations in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," and applicable NRC guidance.
- Your input to the NEPA process for the EIS is vital your comments will be used in developing the appropriate scope and content of the EIS.
- We are at the beginning of the process.
- No decisions have as yet been made.



NRC's Licensing Review / EIS Process for WCS's Proposed Consolidated Interim Storage Facility

James Park Environmental Project Manager

Environmental Review Branch Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission

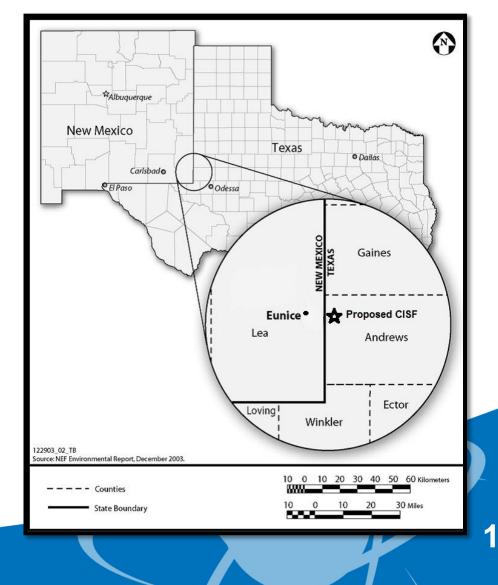
WCS's Proposed Consolidated Interim Storage Facility (CISF) for Spent Nuclear Fuel



- The CISF would be located on about 320 acres at WCS's site in Andrews County, Texas
- WCS is currently licensed by the State of Texas (under agreement with the NRC) to treat, store, and dispose of certain types of radioactive materials at its Andrews County site.

NOTE: Map as shown here not to scale. Locations are approximate.

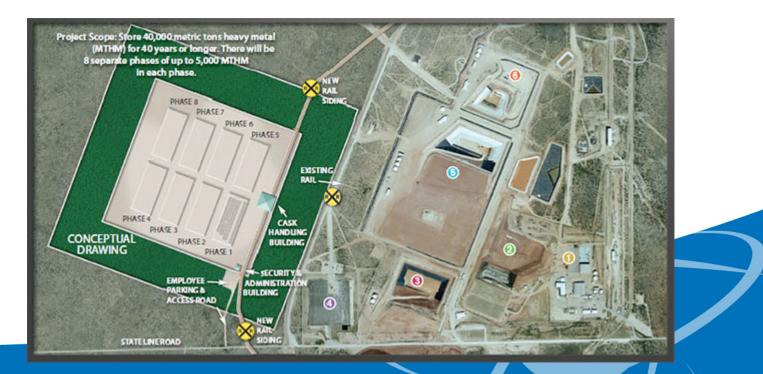
Source: WCS's Environmental Report (2014)



WCS's Proposed Consolidated Interim Storage Facility for Spent Nuclear Fuel



- WCS proposes to construct the CISF in 8 phases over 20 years, with each storage phase consisting of 5,000 metric tons of uranium (MTUs), with eventually 40,000 MTUs to be stored in the CISF.
- If licensed by the NRC, the CISF would be authorized for the first phase only, with WCS required to request subsequent license amendments to store additional spent fuel at the site.



WCS's Proposed Consolidated Interim Storage Facility for Spent Nuclear Fuel (Cont'd.)



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- WCS assumes spent fuel initially would come from decommissioned shutdown nuclear reactor sites in the U.S.
- WCS expects approximately 3,000 canisters of spent fuel would be transported by rail to the CISF over 40 years.
- WCS would construct a new 1-mile long rail spur to provide access to the CISF.
- Once at the WCS site, the spent fuel would be offloaded from the railcars, checked for damage and leaks, and then placed in either vertical or horizontal storage modules that are located on concrete pads.



WCS's Proposed Consolidated Interim Storage Facility for Spent Nuclear Fuel (Cont'd.)





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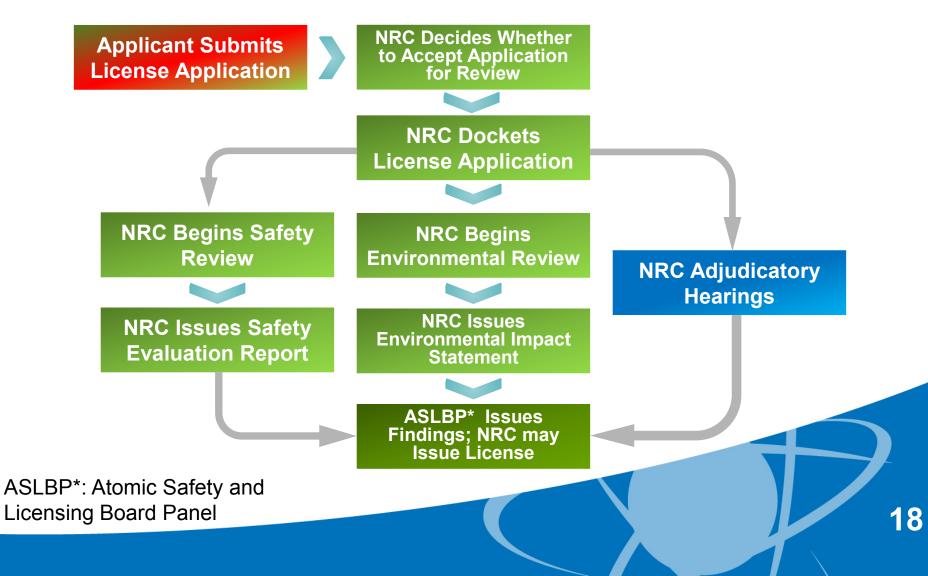
Notice of Opportunity to Request a Hearing and Petition for Petition for Leave to Intervene



- NRC published in the *Federal Register*, on January 30, 2017 (82 FR 8773), notice of NRC's acceptance of WCS's license application for detailed review, and opportunity to request a hearing and petition for leave to intervene.
- Requests for hearing and petitions for leave to intervene are to be filed by May 31, 2017. Instructions for how to do so are provided in the January 30, 2017, *Federal Register Notice.*

NRC License Application Review Process





NRC Safety Review



- NRC staff conducts a comprehensive technical review of the applicant's Safety Analysis Report (SAR).
 - NRC has its own experienced technical staff and independent contractors to review and evaluate the application
- As part of the review process, NRC staff may:
 - Issue a request for additional information from the applicant
 - Conduct independent confirmatory analyses, as needed
- NRC staff documents its conclusions in a publicly available Safety Evaluation Report (SER)

NRC's Safety Review: What is required?



- As required by NRC regulations, any proposed independent spent fuel storage installation (ISFSI) must provide for the following safety requirements:
 - maintains confinement of radioactive material,
 - provides adequate radiation shielding for workers and the public,
 - prevents nuclear criticality, and
 - maintains retrievability of spent fuel
- The applicant must demonstrate that the proposed storage system design, when used at the proposed location, provides the above safety objectives under the following conditions:
 - Normal conditions of storage
 - Off-normal (Unusual) Events (includes temperature and pressure extremes)
 - Accidents (includes earthquakes, fires, floods, lightning, tornado, complete air flow blockage, and cask drop and tip-over)

NRC License Review Process: Preliminary Review Schedule



- EIS Scoping Comment Period: Nov. 14, 2016 Apr. 28, 2017
- NRC Acceptance Review of WCS' Application Completed: Jan. 26, 2017
- Federal Register Notice of Opportunity to Request Hearing and Petition for Leave to Intervene (82 FR 8773) Issued: Jan. 30, 2017
- Draft EIS Issued for Public Comments: Spring 2018*
- Safety Review / Safety Evaluation Report Completed: ~ 21 months
- Environmental Review / Final EIS Completed: ~ 26 months
- License Decision: Spring 2019 *

* NOTE: Schedule subject to change based on quality of the WCS' license application, responsiveness to requests for additional information, conduct of an adjudicatory hearing (if requested and granted), availability of funding, and unplanned higher priority operational safety or environmental work.

What is an EIS?

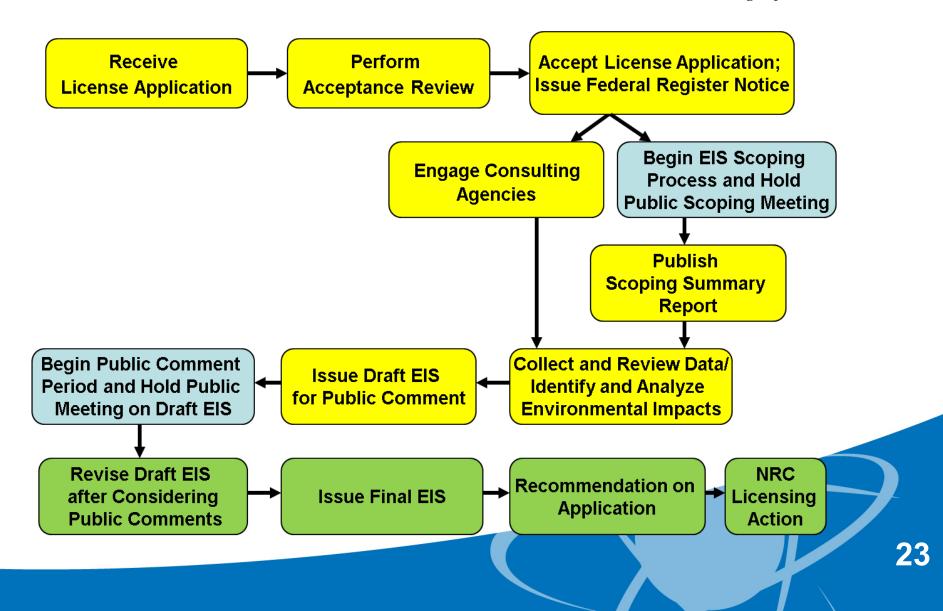


- NRC's environmental review will be documented in an Environmental Impact Statement (EIS).
- EIS provides decision makers and the public with a detailed and thorough evaluation of significant environmental impacts.
- EIS provides sufficient evidence and analysis of impacts to support NRC's Record of Decision and final licensing action.
- NRC EIS for this project will be prepared in accordance with:
 - ➢ NRC regulations in 10 CFR Part 51; and
 - NRC guidance in NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs.



NRC Environmental Review Process





Opportunities for Public Involvement in the EIS Process



- Federal Register Notice of Intent to Prepare EIS and Conduct Scoping Process (81 FR 79531): Nov. 14, 2016
- EIS public scoping comment period: November 14, 2016 – April 28, 2017
- EIS public scoping meetings: Feb. 13, 15, and 23, and April 6, 2017
- Public comment period for Draft EIS (when issued)
- Draft EIS public meeting(s)

EIS Scoping Process



- Scoping is an early and open process designed to:
 - Determine range of issues, alternatives, and potential environmental impacts to be considered in the EIS;
 - Identify significant issues related to the proposed action; and
 - Solicit input from the public and governmental and private sector agencies/organizations to more clearly focus the analysis on issues of genuine concern.
- Principal goals of the scoping process are to:
 - Ensure that important issues and concerns are identified early and are properly studied;
 - Identify alternatives to be examined;
 - Identify significant issues to be analyzed;
 - Eliminate unimportant issues from detailed consideration; and
 - Identify public concerns.

Preliminary Contents of Draft EIS



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- 1. Introduction
- 2. Proposed Action and Reasonable Alternatives
- 3. Affected Environment
- 4. Environmental Impacts
- 5. Mitigation Measures
- 6. Environmental Measurements and Monitoring
- 7. Benefit-Cost Analysis
- 8. Consultation and Coordination

Alternatives to be Considered



- Proposed Action NRC grants a license for a period of 40 years to WCS for the construction and operation of the CISF. Construction of the CISF would occur in 8 phases and take place over 20 years. Impacts evaluated are from the potential storage of 40,000 MTUs in the CISF.
- No-Action NRC would not grant a license to WCS for the CISF. Other licensed activities at the WCS site would continue. (<u>NOTE</u>: No-Action Alternative serves as a baseline for comparison of potential impacts with other alternatives.)
- **Other Alternatives** -- may be identified through EIS scoping process and NRC analysis.

Environmental Impacts Considered

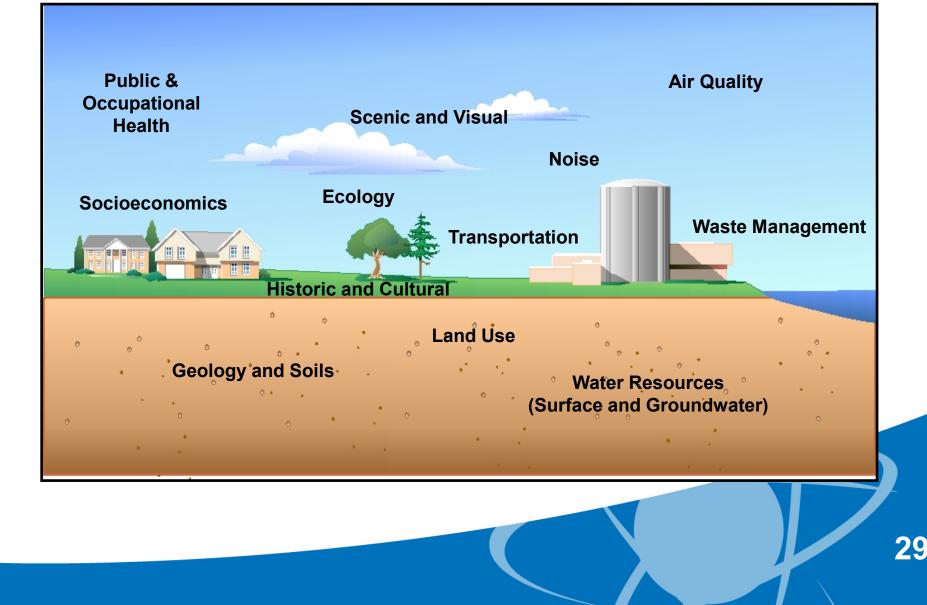


- EIS will identify and evaluate potential environmental impacts of the proposed action and reasonable alternatives.
- Example review areas include:
 - Land use
 - Transportation
 - Geology and soils
 - Water resources
 - Ecological resources
 - Air quality
 - Socioeconomics
 - Public and occupational health
 - Environmental justice
- Other review areas may be identified through EIS scoping process.

Environmental Impacts Considered



Protecting People and the Environment



How to Provide Scoping Comments*



- Present oral or written comments at this meeting.
- Federal Rulemaking Website: Go to <u>http://www.regulations.gov</u> and search for Docket ID NRC-2016-0231.
- Mail comments (showing Docket ID NRC-2016-0231 in subject line) to:

Cindy Bladey Office of Administration Mail Stop: OWFN–12–H08 U.S. Nuclear Regulatory Commission Washington, DC 20555–0001

• E-mail comments to WCS_CISF_EIS@nrc.gov.

* Scoping comment period ends April 28, 2017

For Additional Information:



- <u>Federal Rulemaking Website</u>: Go to <u>http://www.regulations.gov</u> and search for Docket ID NRC-2016-0231.
- <u>NRC's Public Document Room (PDR)</u>: One White Flint North, 11555 Rockville Pike (1st floor), Rockville, MD 20852 (Tel: 800-397-4209; Fax: 301-415-3548; <u>pdr.resource@nrc.gov</u>)
- <u>NRC's Agencywide Documents Access and Management System (ADAMS)</u>: <u>http://www.nrc.gov/reading-rm/adams.html</u>, using the WCS CISF-specific NRC docket number 72-1050.
- <u>NRC Public Web Site for WCS's application</u>: <u>https://www.nrc.gov/waste/spent-fuel-storage/cis/waste-control-specialist.html</u>
- NRC Contacts:
 - Licensing and Safety Review Project Manager: John-Chau Nguyen 301-415-0262; <u>John-Chau.Nguyen@nrc.gov</u>
 - Environmental Review Project Manager: James Park 301-415-6954; James.Park@nrc.gov