

INIS Fluorine Extraction and Depleted Uranium Deconversion Plant

Facility Licensing

January 14, 2010

Meeting Objectives

- **Summarize**
 - **Proposed INIS facility license application**
 - **NRC licensing process**
 - **Environmental Impact Statement (EIS) process**
- **Answer public questions**

Tonight's Agenda

- **Welcome**
- **Licensing Process (15 minutes)**
- **Environmental Impact Statement Development Process (15 minutes)**
- **Public Questions and Comments**
- **Wrap up (15 minutes)**
- **Adjourn**

Who is the NRC?

- **NRC is an independent federal agency**
- **NRC is not an advocate of the proposed deconversion plant or any other facility**

NRC Mission

Protect

- **Public health and safety**
- **Common defense and security**
- **The environment**

We accomplish this mission through the promulgation of regulations, the licensing of activities, and the inspection of licensees to verify compliance with the regulations.

NRC Participants

- **Tom Hiltz – Licensing Manager**
- **Matt Bartlett – Licensing Project Manager**
- **Johari Moore – Environmental Project Manager**
- **Mike Clark – Attorney**

Licensing Process

Matt Bartlett, NRC
Licensing Project Manager

Project Background

- **Location:** Lea County, NM
(about 14 miles west of Hobbs, NM)
- **Name:** Fluorine Extraction Process & Depleted Uranium Deconversion Plant
- **Technology:** Chemical Deconversion
- **Product:** High Purity Fluoride Products, Anhydrous Hydrogen Fluoride, and Uranium Oxide for disposal

Deconversion in Fuel Cycle

- **Mining & Milling:** Uranium oxides from nature
U-238 = 99.3% **U-235 = 0.7%**
- **Conversion:** Oxides converted to uranium hexafluoride (UF₆)
- **Enrichment:** U-235 increased in a portion of material



- **Deconversion:** DUF₆ turned to uranium oxides and fluoride products

INIS Process

- **Receipt:** DUF6 from enrichment facilities
- **Processing:** Chemical conversion to fluoride products and uranium oxide
- **Product:** Fluoride compounds sold
- **Waste:** Uranium oxides disposed as low level waste

NRC Preliminary Licensing Schedule

- **Receipt of the application (12-30-09)**
- **Conduct an acceptance review (45 days)**
- **Perform an in-depth safety review (18 month)**
- **Prepare an Environmental Impact Statement (EIS) (24 month)**
- **If approved by the NRC, issue license**

This schedule may change based on the quality of the applicant's license application, the responsiveness to requests for additional information, and unplanned higher priority operational safety work.

NRC Licensing Process

- **Safety Review**
 - Establish a team of technical reviewers
 - Examine safety programs and integrated safety analysis
 - Request additional information, as needed
- **Licensing:**
 - Publish Safety Evaluation Report (SER) and EIS
 - Hold public meeting on final SER and EIS
 - If approved, issue license

Opportunities for Public Involvement

- **Four additional NRC public meetings**
 - Environmental Scoping
 - Draft EIS
 - Final EIS and SER
 - Inspection and Oversight Process
- **Opportunity to request a hearing**

Additional Information

NRC Website <http://www.nrc.gov>

Fuel Cycle Facts

<http://www.nrc.gov/materials/fuel-cycle-fac.html>

– **Deconversion**

E-mail Distribution or Questions

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Environmental Review Process

Johari Moore, NRC
Environmental Project Manager

Laws, Regulations, and Guidance

- The National Environmental Policy Act of 1969, as amended (NEPA), requires Federal agencies to consider the environmental impacts of certain actions.
- NRC implements NEPA with Title 10, *Code of Federal Regulations Part 51 (10 CFR 51)*.
- Staff procedures for implementing 10 CFR 51 are described in environmental review guidance (NUREG-1748).

What is an EIS?

- An Environmental Impact Statement (EIS) describes potential environmental impacts of a proposed action and its alternatives.
- An EIS provides information for the public and agency decision makers.
- An EIS addresses five main topics:
 - The proposed action, including its purpose and the need it meets
 - Alternatives, including no action
 - The affected environment
 - Environmental impacts
 - Mitigative measures

Review Scope

- Reviews address the potential impacts of facility construction, operation, and decommissioning.
- Example review/resource areas include:
 - Air, water, soils, plants, and animals
 - Public and worker health
 - Historic, archaeological, or architectural property and artifacts
 - Economic resources, cultural resources, and social services
 - Environmental justice
- Reviews address direct, indirect, and cumulative impacts.

Environmental Review Process

