

**Public Meeting on
Draft Environmental Impact Statement
for the Proposed Fluorine Extraction Process and
Depleted Uranium De-conversion Plant
in Lea County, New Mexico**

February 2, 2012

The NRC Roles and Responsibilities

Kevin Hsueh, Chief
Environmental Review Branch
Office of Federal and State Materials and Environmental
Management Programs

Role of NRC

- Independent Federal government agency
- Ensuring protection of public health and safety, and the environment in the use of radioactive materials
- NRC does not build, operate, or promote nuclear facilities

NRC Involvement

- International Isotopes Fluorine Products Inc. proposes to build an extraction and de-conversion facility
- Proposed location west of Hobbs
- License required from NRC

Environmental Review

- Part of NRC's decision regarding International Isotopes license
- Required by the National Environmental Policy Act of 1969, as amended (NEPA)
- Product is an Environmental Impact Statement (EIS)

Meeting Purpose

- Present results of NRC Draft EIS
- Listen to your comments
- Comments will be addressed in Final EIS

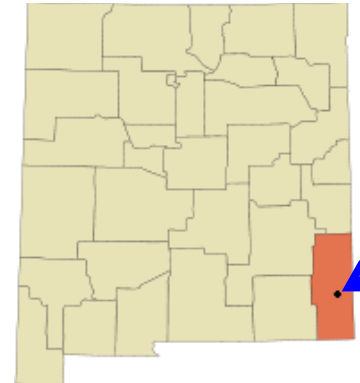
Licensing Process for the Proposed International Isotopes Inc. Fluorine Products and De-conversion Facility

Maria Guardiola, NRC
Project Manager
Office of Nuclear Material Safety and
Safeguards

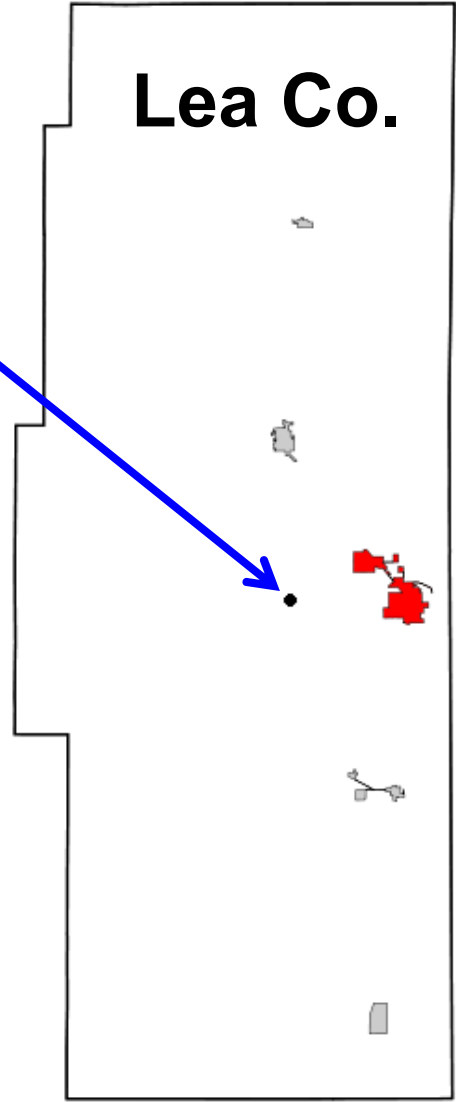
Objectives

- **Summary of INIS proposed facility**
- **Overview of licensing process**

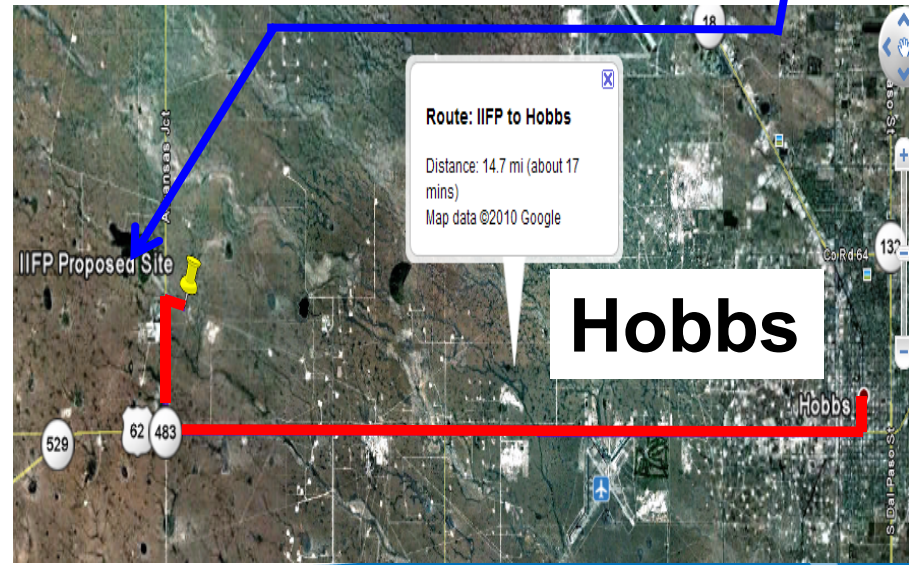
Location: Lea County New Mexico



IIFP



14 mi. west of Hobbs

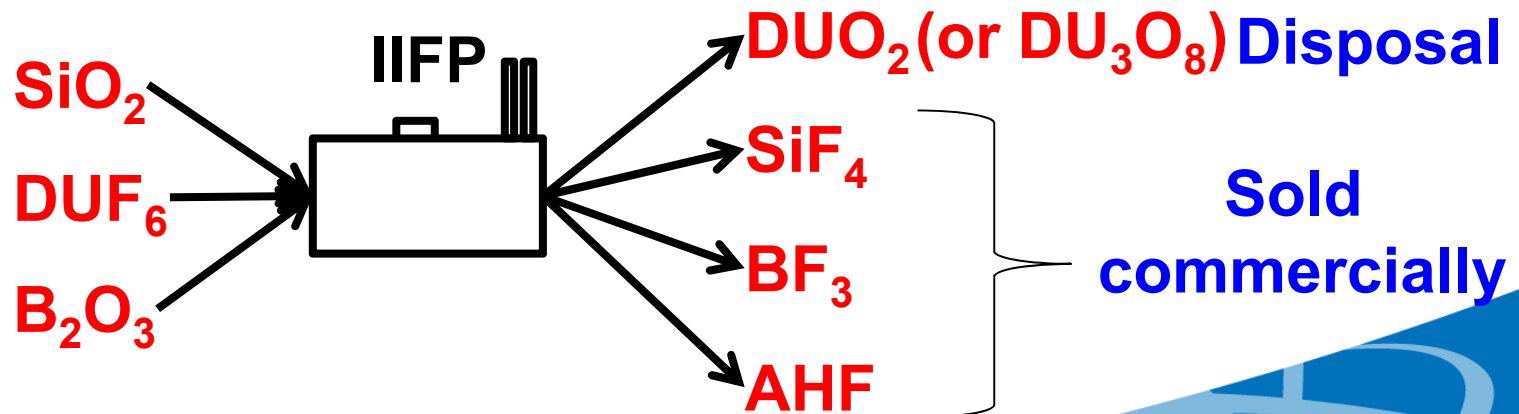


INIS Process

Receipt: DUF6 from enrichment facilities



Processing: Chemical Deconversion of DUF6



NRC Review Schedule

Application Received (December 30, 2009)

**Draft Environmental Impact Statement (DEIS)
(January 2012)**

Safety Evaluation Report (February 2012)

Final EIS (Summer 2012)

If approved, issue license (Summer 2012)

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

Radiation, chemical, fire, emergency preparedness, environment, seismic, security, etc.

Integrated Safety Analysis Summary

Identify and mitigate/prevent accidents

Outcome

Publish Safety Evaluation Report (SER)

Opportunities for Involvement

Contact NRC

Licensing Review: Matthew Bartlett

301.492.3119

Matthew.Bartlett@nrc.gov

Environmental Review: Asimios Malliakos

301.415.6458

Asimios.Malliakos@nrc.gov

Two additional NRC public meetings

Final EIS & SER

Inspection and Oversight

Additional Information

NRC Website

- <http://www.nrc.gov>

Fuel Cycle Facts

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

E-mail Distribution or Questions

- matthew.bartlett@nrc.gov

Draft Environmental Impact Statement for the Proposed Fluorine Extraction Process and Depleted Uranium De-Conversion Plant

Asimios Malliakos, NRC
Environmental Project Manager
Office of Federal and State Materials and
Environmental Management Programs

What is an EIS?

- NRC staff documented its environmental review in an Environmental Impact Statement (EIS)
- An EIS describes the potential environmental impacts of a proposed action and its alternatives
- An EIS provides information to the public and the agency decision makers

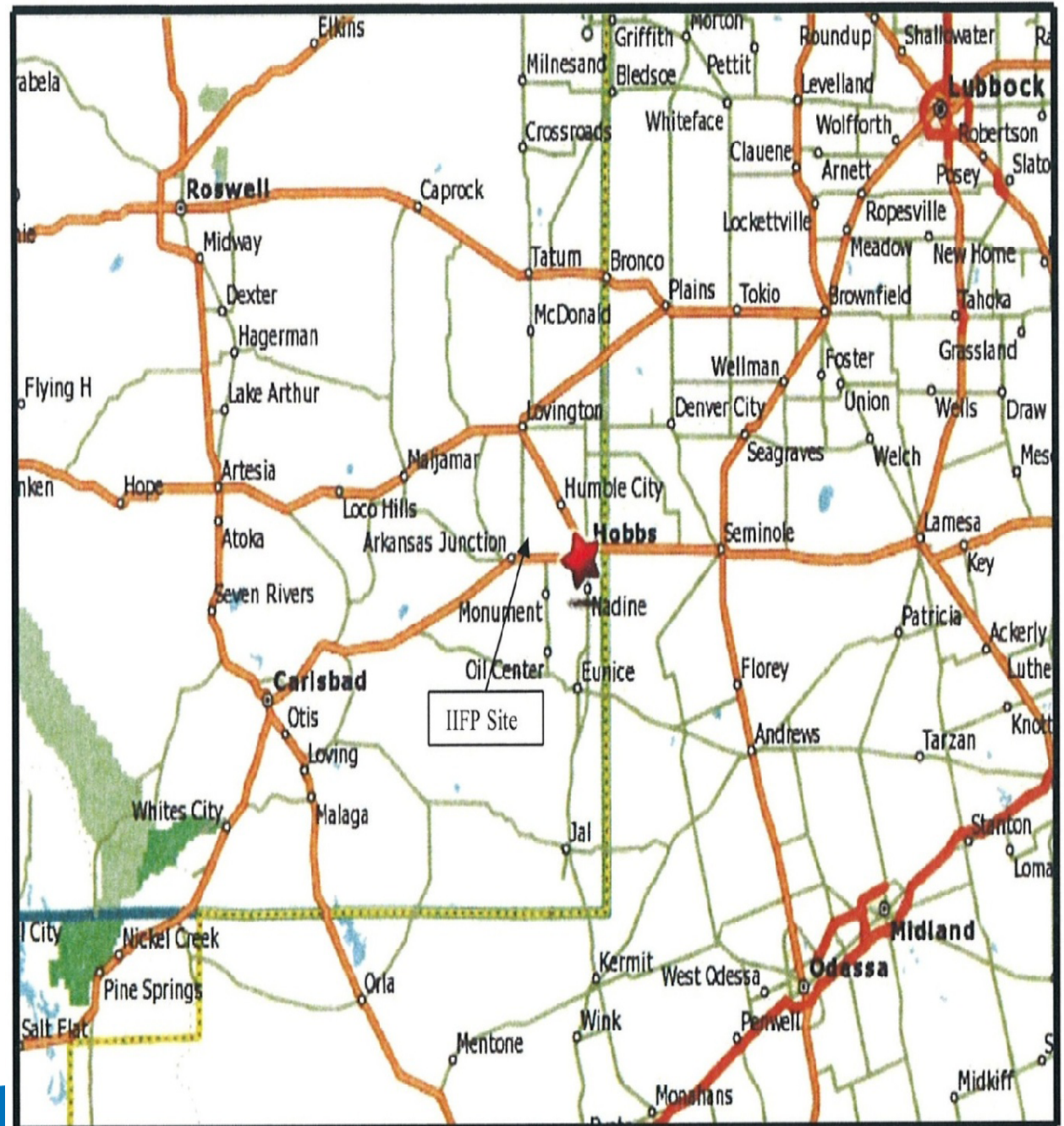
Draft EIS Contents

1. Introduction (Proposed Action, Purpose & Need)
2. Alternatives
3. Affected Environment
4. Environmental Impacts
5. Mitigation
6. Environmental Measurement & Monitoring Programs
7. Benefit-Cost Analysis

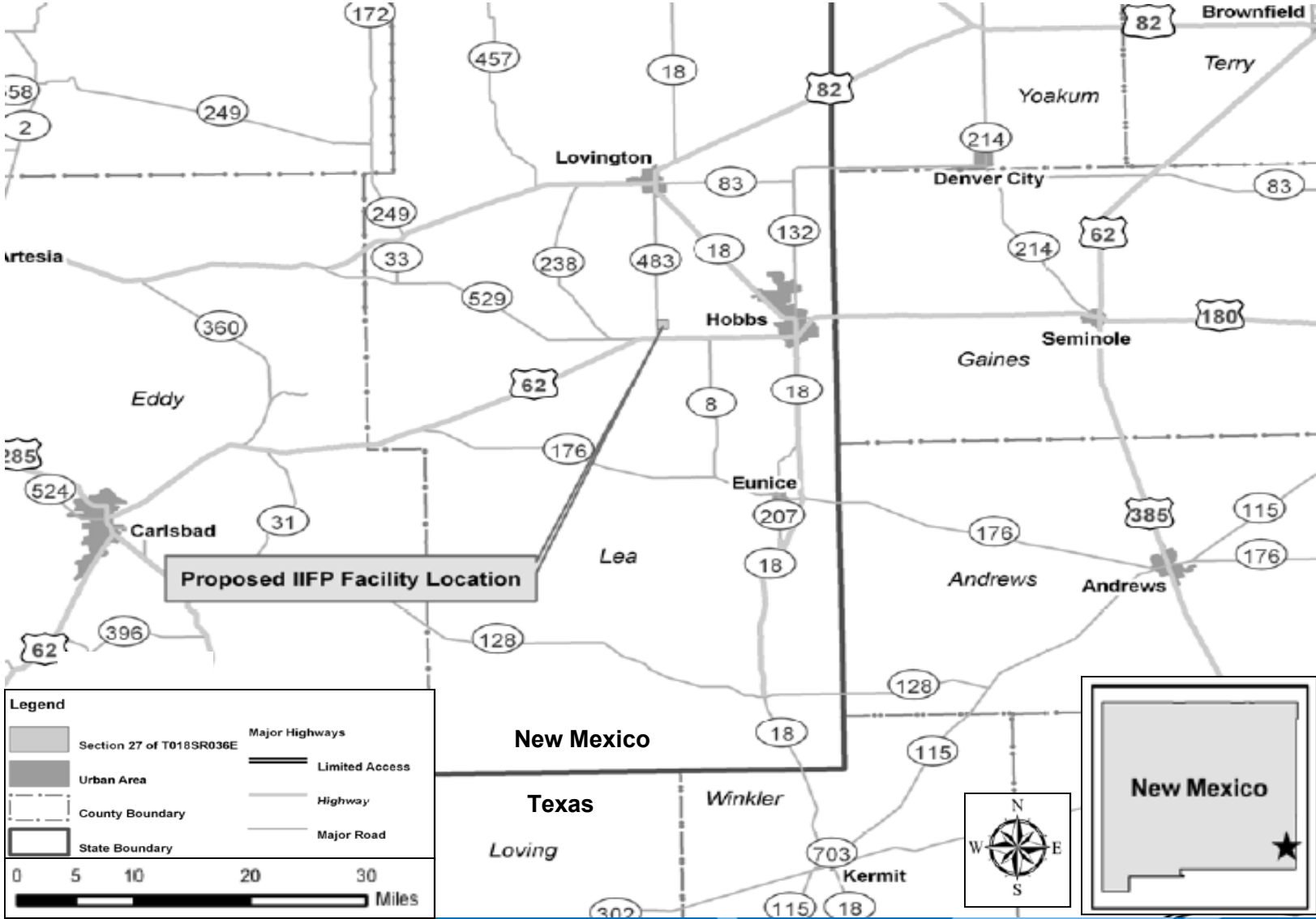
Where is the proposed site?

[International Isotopes Fluorine Products. Environmental Report for the Uranium Processing Plant, December 2009]

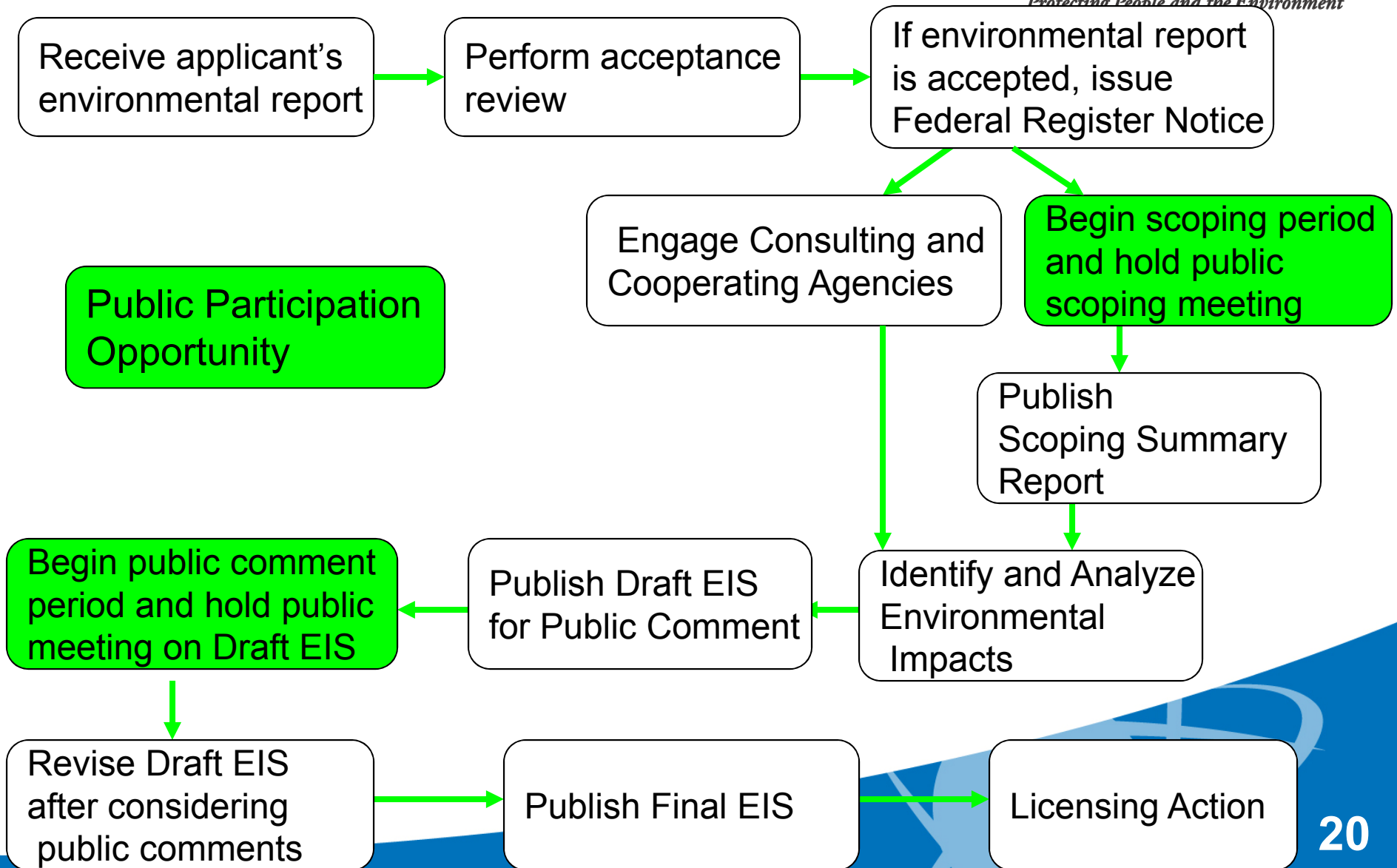
Accessible at:
<http://www.nrc.gov/reading-rm/adams.html>
Docket No. 40-9086



Proposed IIFP Facility Location Lea County, New Mexico



Environmental Review Process



The Proposed Action

- Construct, operate, and decommission a facility to deconvert depleted uranium hexafluoride (DUF_6) into depleted uranium oxides for disposal.
- Nuclear reactor fuel requires uranium with a higher proportion of the uranium-235 (U-235) isotope than is found in naturally occurring uranium (approximately 0.7 percent by weight).
- Fuel enrichment facilities use a fuel enrichment process to increase the portion of U-235 isotopes in the nuclear fuel.

The Proposed Action (Continued)

- DUF_6 is a byproduct of the nuclear reactor fuel enrichment process.
- DUF_6 has a reduced concentration of U-235 and is primarily stored at the enrichment facilities.
- In addition to deconverting DUF_6 into depleted uranium oxides for disposal, the process at the proposed facility will recover fluoride products for commercial sale.

The Proposed Action (Continued)

- If issued a license by NRC, the proposed facility, comprising 40 acres would be located within a 640-acres section in Lea County, approximately 14 miles west of Hobbs, New Mexico
- This 640-acres parcel of land contained open range land used for grazing as well as overhead transmission lines and underground petroleum pipelines.

Purpose and Need

- The proposed action is intended to fulfill the need to deconvert DUF_6 produced at enrichment facilities to more chemically stable uranium oxide compounds that are generally suitable for disposal as low level waste.
 - Long-term storage of DU in the UF_6 form represents a potential chemical hazard if not properly managed, and conversion to more-stable DU oxides is preferable.
 - The proposed facility should be capable of deconverting approximately one-tenth of the DUF_6 projected to be produced annually in the United States by commercial enrichment facilities.

Analysis of Alternatives to the Proposed Action

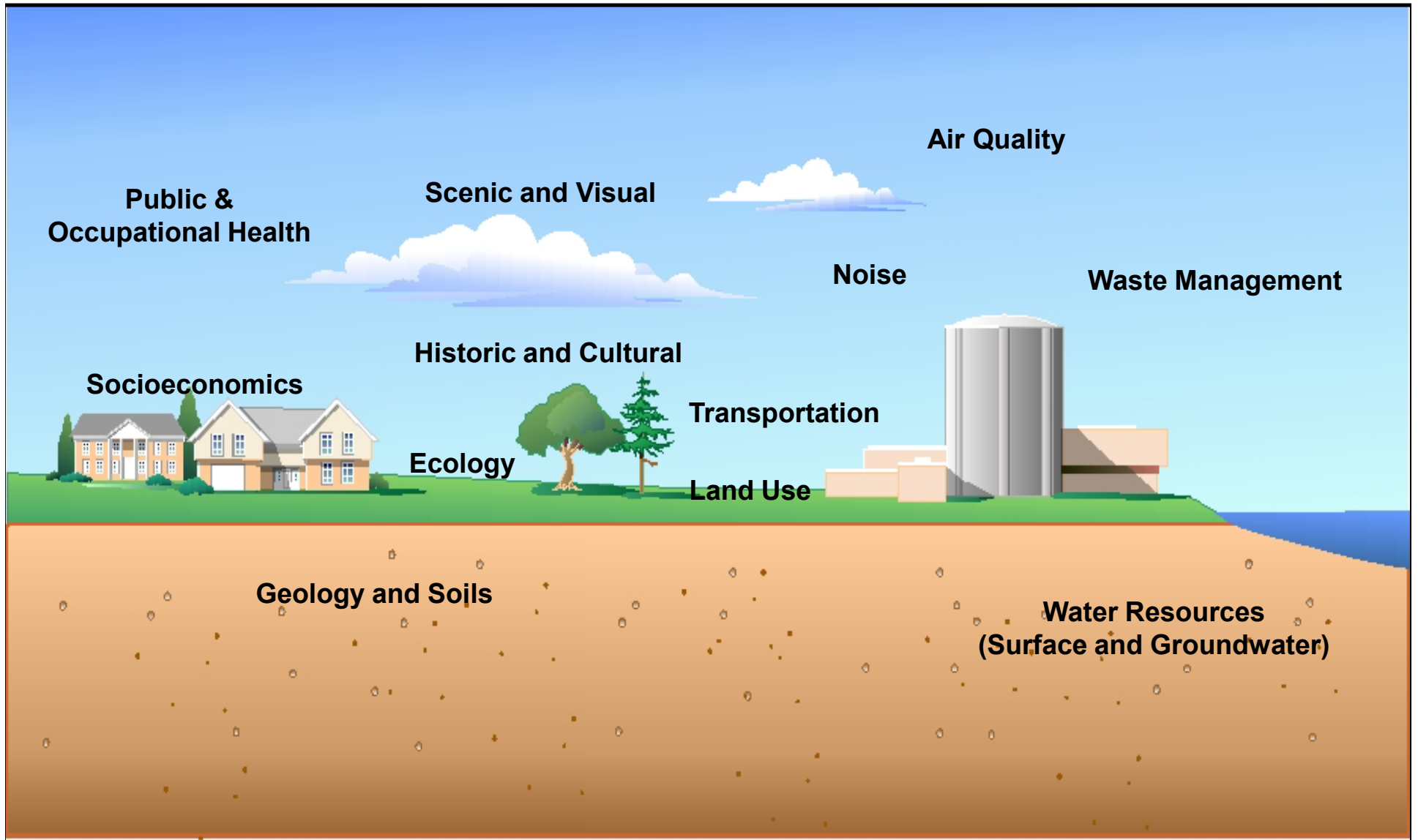
- Alternatives Considered, But Eliminated From Further Analysis:
 - Alternative sites
 - Alternative technologies
 - Deconversion of DUF_6 at DOE facilities
 - Overseas deconversion of DUF_6
 - Indefinite storage of DUF_6 at the uranium enrichment facilities
 - Deconversion of DUF_6 at the uranium enrichment facilities
- No-Action Alternative

Environmental Impacts

The NRC defines three impact levels:

- SMALL: *Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.*
- MODERATE: *Environmental effects are sufficient to alter noticeably, but not destabilize, important attributes of the resource.*
- LARGE: *Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.*

Resource Areas



Summary of Draft Environmental Impacts

The NRC staff has preliminarily determined that the environmental impacts of the proposed project would be **SMALL**, with the exception of:

- **SMALL to MODERATE** impacts to air quality associated with vehicle emissions and fugitive dust emissions during the construction of the facility and nonradioactive emissions during the operation of the facility.

Air Quality

- **Construction**

- Emissions from construction equipment and commuter/delivery vehicles
- Fugitive dust emissions (e.g., land clearing)
- Mitigation measures

- **Operation**

- Emissions from equipment (e.g., natural-gas fire boilers) and commuter/delivery vehicles
- Gaseous effluents
- Mitigation measures

Basis for Recommendation

- The NRC staff has preliminarily concluded the overall benefits of the proposed facility outweigh the SMALL or SMALL to MODERATE environmental impacts, based on the consideration of the following:
 - The need to deconvert DUF_6 produced at enrichment facilities to more chemically stable uranium oxide compounds that are generally suitable for disposal as low level waste.
 - The potential environmental impacts from the proposed action are SMALL with the exception of SMALL to MODERATE for air quality.

Preliminary Recommendation

- The NRC staff preliminarily recommends that, unless safety issues mandate otherwise, the proposed license be issued to INIS.

Draft EIS Availability

- NRC's Public Document Room (PDR):
One White Flint North, 11555 Rockville Pike (1st floor),
Rockville, MD 20852 (Tel: 800-397-4209; Fax: 301-415-3548;
pdr.resource@nrc.gov)
- NRC's Agencywide Documents Access and Management System (ADAMS): <http://www.nrc.gov/reading-rm/adams.html>
(Accession Number: ML12001A000)
- <http://www.nrc.gov/reading-rm/doc-collections/nuregs/docs4comment.html>, "NUREG-2113"
- Hobbs Public Library, 509 North Shipp, Hobbs, NM 88240 (Tel: 575-397-9328)

Additional information?



- Project Website
<http://www.nrc.gov/materials/fuel-cycle-fac/inisfacility.html>
- NRC's electronic reading room (Docket No.40-9086)
<http://www.nrc.gov/reading-rm/adams.html>
- Federal Rulemaking Website (Docket ID: NRC-2010-0143):
<http://www.regulations.gov>
- Contact NRC
 - Licensing Review: Matt Bartlett 301.492.3119
Matthew.Bartlett@nrc.gov
 - Environmental Review: Asimios Malliakos 301.415.6458
Asimios.Malliakos@nrc.gov

How do I make a comment?



- Speaking at this meeting
- Filling out a yellow comment card at this meeting
- Write to NRC (Docket ID. NRC-2010-0143)
 - Chief, Rules, Announcements and Directives Branch (RADB)
 - Mail Stop TWB 5B01M
 - U.S. Nuclear Regulatory Commission
 - Washington, DC 20555–0001
- Fax to RADB at: (301) 492-3446
- Comment period ends **February 27, 2012.**