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Protecting People and the Environment

NRC Inspection Program

July 1, 2009
NMA/NRC workshop
Linda M. Gersey
NRC RIV

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Discussion Topics

- How the NRC conducts UR inspections
- Decommissioning & Timeliness requirements
- NRC position on using non-approved standards for dose calculations
- Hint on saving YOU $$
- Questions?

How NRC Conducts Inspections

Preparation by Inspector

- Generate inspection plan (non-public, identifies scope of inspection)
- Generate inspection report number (billing)
- Review docket file records
- Review event reports (excursions, spills)
- Locate inspection references
- Pack sampling equipment (survey meter)

How NRC Conducts Inspections, Cont.

Site Inspections -confirm license conditions and regulations are met

- Entrance Meeting (inspection scope)
- Interviews
- Site tours
- Review Records
- Take samples/perform confirmatory measurements
- Exit Briefing (preliminary findings)

How NRC Conducts Inspections, Cont.

After Inspection

- Travel back to office
- Discuss findings with RIV management & HQ Project Manager
- Write inspection report (within 30 days of exit briefing, publicly available)
- If a Notice of Violation is issued-may coordinate with Office of Enforcement
- Branch Chief reviews report and signs

Issue Identified During Inspections

"roving radiation areas"

- Tanks in CPP
- Filters in header houses
- ROs in satellites
- Waste storage bins

Require Radiation Area postings and restricted access

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Decommissioning & Timeliness

- Due to new uranium recovery licenses, NRC reviewing regs & guidance
- NRC legal staff determined that "timeliness rule" under 10 CFR 40.42 applies to ISR wellfields
- Timeliness rule ensures timely decommissioning of facilities upon termination of operations

Decommissioning & Timeliness, cont.

How 10 CFR 40.42 applies to ISR wellfields

Within 60 days of deciding to permanently cease injection of lixiviant in a wellfield, a licensee must initiate decommissioning as approved in your NRC restoration plan

groundwater (GW) restoration = wellfield decommissioning

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Decommissioning & Timeliness, cont.

- Time clock begins at cessation of lixiviant injections and the shift from principal activity of uranium production to initiation of GW restoration

- It is understood that residual uranium in the GW may still be recovered following the cessation of lixiviant injection- it is the NRC's position that recovery of uranium then becomes incidental to GW restoration

Decommissioning & Timeliness, cont.

10 CFR 40.42(h)(1)

A licensee has 24 months to complete GW restoration, once begun,

OR

The licensee must notify the NRC and request an alternate schedule for completion of GW restoration

Decommissioning & Timeliness, cont.

10 CFR 40.42(i) – Requesting an Alternate Schedule

NRC may approve a request for an alternate schedule if:

The licensee shows adequate justification (such as it is not technically feasible to complete within 24 months)

AND

An adequate alternative schedule is requested

AND

The health & safety of the workers and the public will be protected and is in the public interest

Decommissioning & Timeliness, cont.

10 CFR 40.42(f) – Request to delay process

A licensee may request to delay or postpone initiation of the decommissioning process if it is not detrimental to public health & safety and in the public interest

The request must be submitted 90 days prior to licensee's decision to cease operations at a wellfield

Decommissioning & Timeliness, cont.

- Requests for alternate decommissioning schedules and delaying decommissioning actions are licensing processes

- Send requests to your HQ project manager

Decommissioning & Timeliness, cont.

Why is this important to you?

In the past, NRC was not enforcing 10 CFR 40.42 at ISR facilities

BUT….

Beginning summer 2009, NRC will begin to inspect against this requirement

Decommissioning & Timeliness, cont.

NRC inspectors will look at current wellfields in restoration and ensure they are on schedule for restoration within 24 months

OR

Ensure the licensee has an NRC approved alternate schedule

Decommissioning & Timeliness, cont.

If you have are not currently in compliance with restoration of wellfields within 24 months, and do not have an NRC approved alternate schedule for decommissioning….Contact your HQ project manager and discuss

Using Non-NRC Approved Dose Models

Part 20 dose requirements are based on ICRP Publications 26 & 30

Due to the way Part 20 was written- a licensee MAY NOT use a newer version of ICRP guidance or other non-NRC approved models for calculating dose- even if some guidance is more conservative

Using Non-NRC Approved Dose Models, cont.

If a licensee wants to use a newer model to determine doses to workers- (such as using ICRP 68 dose coefficients) they can request an exemption from the regulations to use different guidance

This is part of the licensing process- please discuss with you HQ project manager

Hint to Save You $$

If you send a hard copy of a report (such as annual environmental monitoring report) to NRC HQ, and you are required to submit a **COPY** to the RIV office

That **COPY** can be in electronic form (disk, thumb drive)

No duplicate hard copies are needed!!

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Any Questions??

Implementing the Additional Protocol

U.S. Department of Commerce
Bureau of Industry and Security
and
U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards

Jill Shepherd
U.S. DOC
Washington, DC

Tom Grice
U.S. NRC
Washington, DC

NMA/NRC Uranium Recovery Workshop
Denver, Co
July 2, 2009

U.S. Additional Protocol Status

- Executive Order Directing Implementation – February 4, 2008
- DOC (15 CFR Parts 781-786) – October 31, 2008
- Regulations (10 CFR Parts 75 and 110) – December 24, 2008
- Ratification and Entry into Force – January 6, 2009
- Information Collection Complete - February 13, 2009
- Assessment/Vetting - March 31, 2009
- Formal Certification to the White House – April 17, 2009
- Submission of U.S. Initial AP Declaration – July 5, 2009

The U.S. Additional Protocol

- Expands U.S. declaration requirements and IAEA rights of access to nuclear-related activities
- Requires reporting of and access to all aspects of the nuclear fuel-cycle, such as:
  - Mining / ore processing
  - Nuclear-related equipment manufacturing
  - Nuclear-related imports (upon request by IAEA) and exports (quarterly) of equipment and materials
  - Research and development not involving nuclear material (both publicly and privately funded)
- Expands access to nuclear fuel cycle facilities, activities, and related locations (complementary access)

Additional Protocol Reportable Activities

- Article 2.a (i) - Fuel cycle-related R&D (Govt. Related)
- Article 2.a (iii) - Activities at nuclear facilities†
- Article 2.a (iv) - Certain fuel cycle-related manufacturing
- Article 2.a (v) – Uranium hard rock mines and concentration plants and mills
- Article 2.a (vi) - Import, export, or possession of source materials preceding starting point of IAEA safeguards
- Article 2.a (ix) - Export of nuclear fuel cycle-related equipment and non-nuclear material
- Article 2.b. (i) – Fuel cycle-related R&D (Private)

† Nuclear facilities previously selected for IAEA Safeguards.

Anticipated Impact on Industry

- Low verification burden
  - Minimal reporting requirements
  - User-friendly report forms
  - No systematic complementary access (only a few visits anticipated annually)
  - Complementary access to R&D and manufacturing locations preceded by request for clarification

- Possible co-located DOC and NRC-regulated activities
  - For complementary access at locations where co-located activities exist, the agency responsible for regulating the specific activity of interest will serve as the Lead Agency.

Implementation Responsibility

- NRC
  - All commercial industry locations that fall within the boundary of the controlled or restricted area delineated on an NRC license, ***not*** subject to DOD or DOE Additional Protocol reporting requirements
- DOC (Bureau of Industry and Security)
  - All commercial industry locations ***not*** licensed by NRC and ***not*** subject to DOD or DOE Additional Protocol reporting requirements

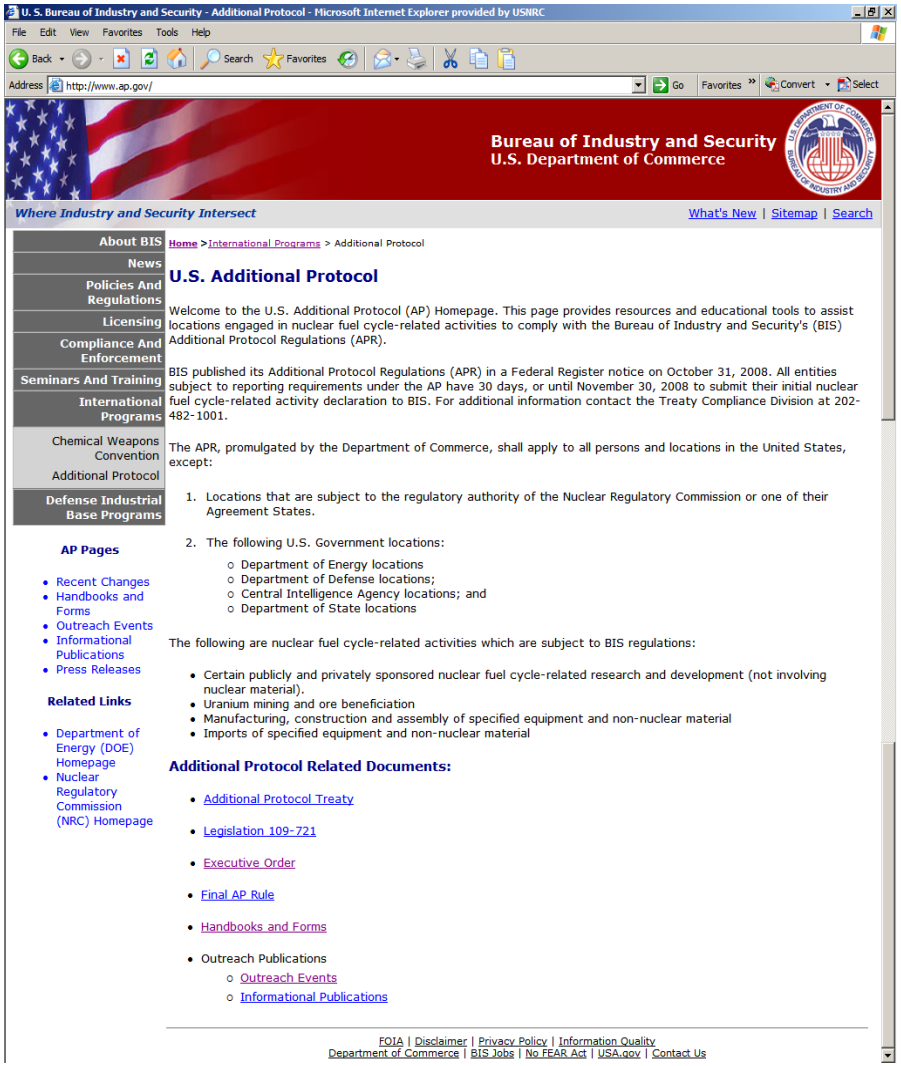
Corresponding NRC and DOC Regulations

- **NRC Regulations**
  - **(10 CFR Parts 75 and 110)**
  - Includes all NRC and Agreement State licensees versus only NRC licensed facilities
  - Published as a direct final rule (December 23, 2008)

- **DOC Regulations**
  - **(15 CFR Parts 781-786)**
  - Issuance of Proposed Rule (July 25, 2008)
  - Public comment period (closed August 25, 2008)
  - Final Rule (October 31, 2008)

Guidance Document Development

- Website with applicable references and documents, www.AP.gov
- Joint DOC/NRC Additional Protocol Reporting Handbooks
  - Reporting guidance
  - Forms
  - Step by step instructions


U. S. Bureau of Industry and Security - Additional Protocol - Microsoft Internet Explorer provided by USNRC
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AP Pages
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Handbooks and Forms
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Press Releases
Related Links
Department of Energy (DOE) Homepage
Nuclear Regulatory Commission (NRC) Homepage
Home > International Programs > Additional Protocol
U.S. Additional Protocol
Welcome to the U.S. Additional Protocol (AP) Homepage. This page provides resources and educational tools to assist locations engaged in nuclear fuel cycle-related activities to comply with the Bureau of Industry and Security's (BIS) Additional Protocol Regulations (APR).
BIS published its Additional Protocol Regulations (APR) in a Federal Register notice on October 31, 2008. All entities subject to reporting requirements under the AP have 30 days, or until November 30, 2008 to submit their initial nuclear fuel cycle-related activity declaration to BIS. For additional information contact the Treaty Compliance Division at 202-482-1001.
The APR, promulgated by the Department of Commerce, shall apply to all persons and locations in the United States, except:
1. Locations that are subject to the regulatory authority of the Nuclear Regulatory Commission or one of their Agreement States.
2. The following U.S. Government locations:
Department of Energy locations
Department of Defense locations;
Central Intelligence Agency locations; and
Department of State locations
The following are nuclear fuel cycle-related activities which are subject to BIS regulations:
Certain publicly and privately sponsored nuclear fuel cycle-related research and development (not involving nuclear material).
Uranium mining and ore beneficiation
Manufacturing, construction and assembly of specified equipment and non-nuclear material
Imports of specified equipment and non-nuclear material
Additional Protocol Related Documents:
Additional Protocol Treaty
Legislation 109-721
Executive Order
Final AP Rule
Handbooks and Forms
Outreach Publications
Outreach Events
Informational Publications
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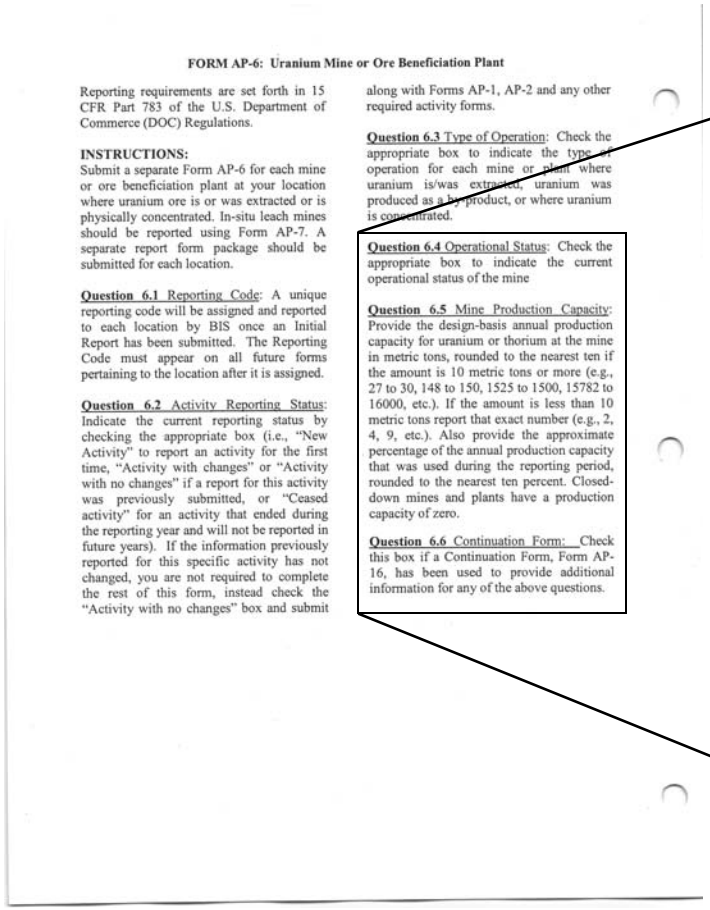
DOC/NRC AP Reporting Forms

FORM APPROVED: OMB NO. (TBD)

	U.S. DEPARTMENT OF COMMERCE **Bureau of Industry and Security** **U.S. NUCLEAR REGULATORY COMMISSION** **Office of Nuclear Material Safety and Safeguards**	**Date Received** (Leave Blank)
	ADDITIONAL PROTOCOL REPORT	
	FORM AP-6: URANIUM HARD ROCK MINE OR ORE BENEFICIATION PLANT	
	Submit a separate form for each uranium hard rock mine or ore beneficiation plant. **(NOTE: Provide information on In Situ/Leach Mines on Form AP-7):**	
6.1	Reporting Code (once assigned):	
6.2	Activity Reporting Status: ☐ New activity ☐ Activity with no changes ☐ Activity with changes ☐ Ceased activity (closed down)	
6.3	**Type of Operation** ☐ Open-pit / Surface Mine ☐ Underground Mine ☐ Ore Beneficiation (physical concentration of ore)	
6.4	**Operational Status:** ☐ Operating (mine that produces ore on a routine basis) ☐ Suspended (mine or its infrastructure is capable of operation but production has ceased) ☐ Closed-down (production has ceased and mine or its infrastructure is not capable of further operation)	
6.5	Annual Uranium Production Capacity (in metric tons):	
	Percentage of Production Capacity Used:	
6.6	☐ Check this box if a Continuation Form (Form AP-16) has been used to provide additional information for any of the above questions.	

6.3	**Type of Operation** ☐ Open-pit / Surface Mine ☐ Underground Mine ☐ Ore Beneficiation (physical concentration of ore)
6.4	**Operational Status:** ☐ Operating (mine that produces ore on a routine basis) ☐ Suspended (mine or its infrastructure is capable of operation but production has ceased) ☐ Closed-down (production has ceased and mine or its infrastructure is not capable of further operation)
6.5	Annual Uranium Production Capacity (in metric tons):
	Percentage of Production Capacity Used:

DOC/NRC AP Reporting Instructions



FORM AP-6: Uranium Mine or Ore Beneficiation Plant

Reporting requirements are set forth in 15 CFR Part 783 of the U.S. Department of Commerce (DOC) Regulations.

INSTRUCTIONS:
Submit a separate Form AP-6 for each mine or ore beneficiation plant at your location where uranium ore is or was extracted or is physically concentrated. In-situ leach mines should be reported using Form AP-7. A separate report form package should be submitted for each location.

Question 6.1 Reporting Code: A unique reporting code will be assigned and reported to each location by BIS once an Initial Report has been submitted. The Reporting Code must appear on all future forms pertaining to the location after it is assigned.

Question 6.2 Activity Reporting Status: Indicate the current reporting status by checking the appropriate box (i.e., "New Activity" to report an activity for the first time, "Activity with changes" or "Activity with no changes" if a report for this activity was previously submitted, or "Ceased activity" for an activity that ended during the reporting year and will not be reported in future years). If the information previously reported for this specific activity has not changed, you are not required to complete the rest of this form, instead check the "Activity with no changes" box and submit along with Forms AP-1, AP-2 and any other required activity forms.

Question 6.3 Type of Operation: Check the appropriate box to indicate the type of operation for each mine or plant where uranium is/was extracted, uranium was produced as a by-product, or where uranium is concentrated.

Question 6.4 Operational Status: Check the appropriate box to indicate the current operational status of the mine

Question 6.5 Mine Production Capacity: Provide the design-basis annual production capacity for uranium or thorium at the mine in metric tons, rounded to the nearest ten if the amount is 10 metric tons or more (e.g., 27 to 30, 148 to 150, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 4, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down mines and plants have a production capacity of zero.

Question 6.6 Continuation Form: Check this box if a Continuation Form, Form AP-16, has been used to provide additional information for any of the above questions.

Question 6.4 Operational Status: Check the appropriate box to indicate the current operational status of the mine

Question 6.5 Mine Production Capacity: Provide the design-basis annual production capacity for uranium or thorium at the mine in metric tons, rounded to the nearest ten if the amount is 10 metric tons or more (e.g., 27 to 30, 148 to 150, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 4, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down mines and plants have a production capacity of zero.

Question 6.6 Continuation Form: Check this box if a Continuation Form, Form AP-16, has been used to provide additional information for any of the above questions.

DOC/NRC AP Reporting Forms

FORM APPROVED: OMB NO. (TBD)

U.S. DEPARTMENT OF COMMERCE
Bureau of Industry and Security
U.S. NUCLEAR REGULATORY COMMISSION
Office of Nuclear Material Safety and Safeguards

Date Received (Leave Blank)

ADDITIONAL PROTOCOL REPORT

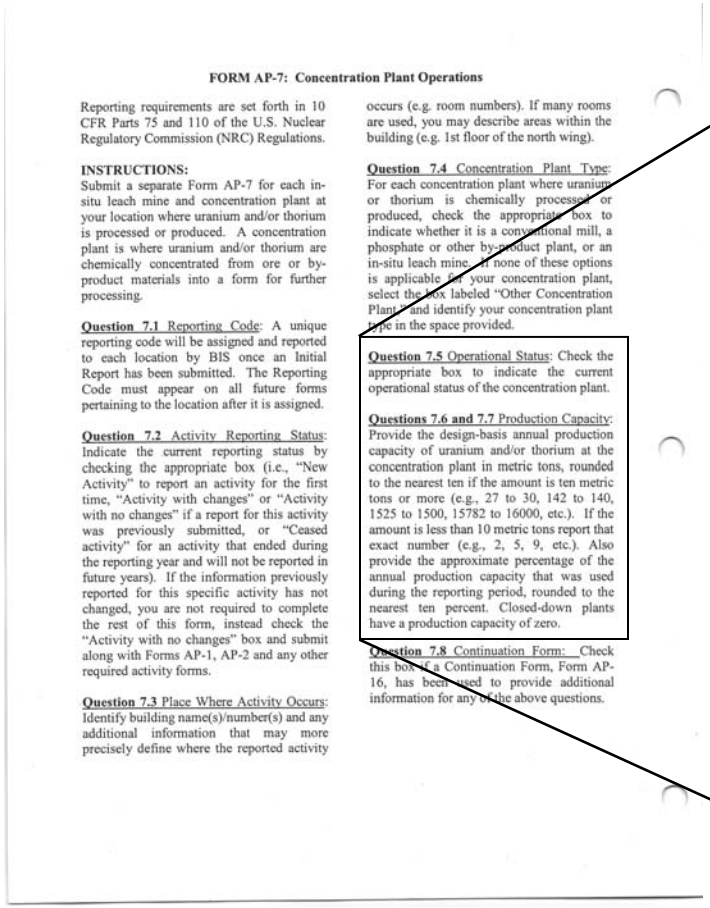
FORM AP-7: CONCENTRATION PLANT OPERATIONS

Submit a separate form for each concentration plant.

7.1	Reporting Code (once assigned):
7.2	Activity Reporting Status: ☐ New activity ☐ Activity with no changes ☐ Activity with changes ☐ Ceased activity (Closed-down)
7.3	Identify building name(s)/numbers(s) and any additional information that may more precisely define where the reported activity occurs (e.g. room numbers) :
7.4	**Concentration Plant Type:** ☐ Conventional Mill ☐ Phosphate by-product plant ☐ In-situ Leach Mine ☐ Other Concentration Plant: _____
7.5	**Operational Status:** ☐ Operating (plant that operates on a routine basis) ☐ Suspended (plant is capable of operation but production has ceased) ☐ Closed-down (production has ceased and plant is not capable of operation)
7.6	Annual Uranium Production Capacity (in metric tons):
	Percentage of Production Capacity Used:
7.7	Annual Thorium Production Capacity (in metric tons):
	Percentage of Production Capacity Used:
7.8	☐ Check this box if a Continuation Form (Form AP-16) has been used to provide additional information for any of the above questions.

7.4	**Concentration Plant Type:** ☐ Conventional Mill ☐ Phosphate by-product plant ☐ In-situ Leach Mine ☐ Other Concentration Plant: _____
7.5	**Operational Status:** ☐ Operating (plant that operates on a routine basis) ☐ Suspended (plant is capable of operation but production has ceased) ☐ Closed-down (production has ceased and plant is not capable of operation)
7.6	Annual Uranium Production Capacity (in metric tons): Percentage of Production Capacity Used:

DOC/NRC AP Reporting Instructions



FORM AP-7: Concentration Plant Operations

Reporting requirements are set forth in 10 CFR Parts 75 and 110 of the U.S. Nuclear Regulatory Commission (NRC) Regulations.

INSTRUCTIONS:
Submit a separate Form AP-7 for each in-situ leach mine and concentration plant at your location where uranium and/or thorium is processed or produced. A concentration plant is where uranium and/or thorium are chemically concentrated from ore or by-product materials into a form for further processing.

Question 7.1 Reporting Code: A unique reporting code will be assigned and reported to each location by BIS once an Initial Report has been submitted. The Reporting Code must appear on all future forms pertaining to the location after it is assigned.

Question 7.2 Activity Reporting Status: Indicate the current reporting status by checking the appropriate box (i.e., "New Activity" to report an activity for the first time, "Activity with changes" or "Activity with no changes" if a report for this activity was previously submitted, or "Ceased activity" for an activity that ended during the reporting year and will not be reported in future years). If the information previously reported for this specific activity has not changed, you are not required to complete the rest of this form, instead check the "Activity with no changes" box and submit along with Forms AP-1, AP-2 and any other required activity forms.

Question 7.3 Place Where Activity Occurs: Identify building name(s)/number(s) and any additional information that may more precisely define where the reported activity occurs (e.g. room numbers). If many rooms are used, you may describe areas within the building (e.g. 1st floor of the north wing).

Question 7.4 Concentration Plant Type: For each concentration plant where uranium or thorium is chemically processed or produced, check the appropriate box to indicate whether it is a conventional mill, a phosphate or other by-product plant, or an in-situ leach mine. If none of these options is applicable for your concentration plant, select the box labeled "Other Concentration Plant" and identify your concentration plant type in the space provided.

Question 7.5 Operational Status: Check the appropriate box to indicate the current operational status of the concentration plant.

Questions 7.6 and 7.7 Production Capacity: Provide the design-basis annual production capacity of uranium and/or thorium at the concentration plant in metric tons, rounded to the nearest ten if the amount is ten metric tons or more (e.g., 27 to 30, 142 to 140, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 5, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down plants have a production capacity of zero.

Question 7.8 Continuation Form: Check this box if a Continuation Form, Form AP-16, has been used to provide additional information for any of the above questions.

Question 7.5 Operational Status: Check the appropriate box to indicate the current operational status of the concentration plant.

Questions 7.6 and 7.7 Production Capacity: Provide the design-basis annual production capacity of uranium and/or thorium at the concentration plant in metric tons, rounded to the nearest ten if the amount is ten metric tons or more (e.g., 27 to 30, 142 to 140, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 5, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down plants have a production capacity of zero.

Information Collection Process

- **NRC and DOC use a joint information collection process**
  - Paper-based forms
  - Annual reports submitted to DOC/BIS by January 31st of each year
- **All AP reporting forms will be sent to the DOC/BIS**
  - DOC/BIS segregates information (DOC vs. NRC)
- **Future plans to develop and implement a computerized reporting system utilizing web-based forms**

Information Collection Timelines

- **Annual reports**
  - Submitted to DOC by January 31st of each year
  - Starting in 2010

- **Export reports**
  - Submitted to DOC 15 days after each quarter
  - April 15th, July 15th, October 15th, and January 15th

Outreach to industry

- **2008 Outreach**
  - The 2008 Annual NMMSS Users Group meeting, May
  - The 3rd Annual Fuel Cycle Information Exchange, June
  - The INMM 49th Annual Meeting, July
  - The Annual TRTR Conference, September
  - The NEI International Uranium Fuel Seminar, October
  - Joint DOC/NRC Informational Seminars (2), November
- **2009 Meetings**
  - NRC / Organization of Agreement States / Conference of Radiation Control Program Directors conference call, January
  - The 2009 Annual NMMSS Users Group meeting, May
  - The 4th Annual Fuel Cycle Information Exchange, June
  - **The 2009 NMA/NRC Uranium Recovery Workshop, July**
  - The INMM 50th Annual Meeting, July

Reported Activities

- Article 2.a (i) – Fuel-cycle related R&D (Govt. Related)
  - DOC – 18 entries; NRC – 4 entries
  - Total US – 128 entries
- Article 2.a (iii) – Buildings at Nuclear Facilities
  - NRC – 8 “Sites”, 118 Buildings
  - Total US – 11 “Sites”, 121 Buildings
- Article 2.a (iv) – Fuel-cycle related manufacturing
  - DOC – 15 entries; NRC – 3 entries
  - Total US – 19 entries

Reported Activities

- Article 2.a (v) – Uranium hard rock mines, concentration plants and mills
  - DOC – 21 entries; NRC – 12 entries
  - Total US – 33 entries
- Article 2.a (vi) – Import, export, or possession of source materials preceding starting point of IAEA safeguards
  - NRC – 1 location
  - Total US – 1 location

Reported Activities

- Article 2.b (i) – Fuel-cycle related R&D (Private)
  - DOC – 2 entries
  - Total US – 2 entries
- Article 2.a (ix) – Exports of nuclear related equipment
  - NRC – 47 entries for 1st quarter 2009
  - Total US – 47 entries for 1st quarter 2009

Points of contact

Liaison with BIS's Treaty Compliance Division:
Jill Shepherd
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Michelle Rehmann
HER Creative Solutions

International Forum on Sustainable Options for Uranium Production

NRC – NMA Workshop

Denver, Colorado 2 July 2009

IFSOUP

Originated during ICEM 07 Conference in Bruges-Belgium

Concept: Adopt sustainability practices to avoid legacy sites

Means to organize:

- Workshops
- Training courses
- Forums for debate
- Information dissemination
- Networking

IFSOUP Objectives

- Independent network developed to bring together:
  - Industry
  - Regulators
  - NGOs

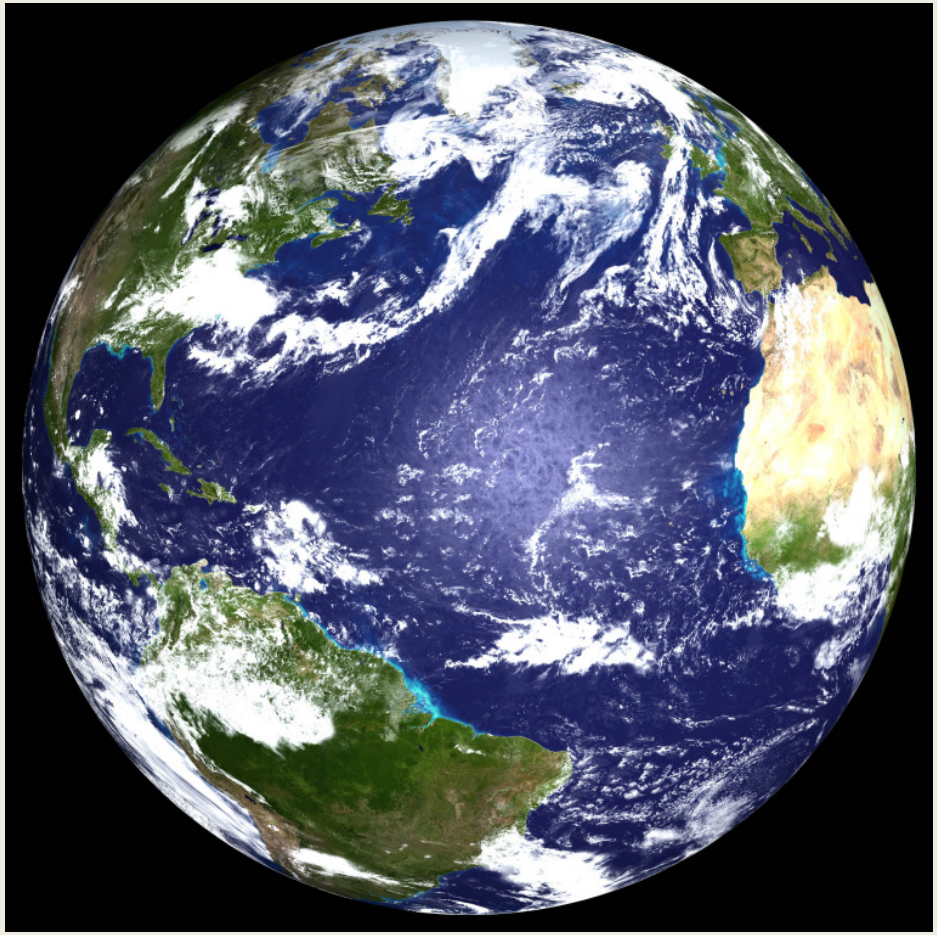
- Purpose: foster and implement sustainable options for uranium production
- Inaugural meeting held as a separate forum during WM Symposium 2008 in Phoenix in February

IFSOUP Objectives Continued

- International forum to discuss and exchange experience on sustainable uranium mining
- Solution holders problem holders
- Technology transfer
- Promote stakeholder participation
- Mining company assistance

IFSOUP Objectives Continued

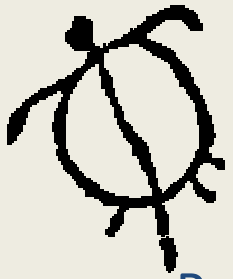
- Multi-sector, forum for workshops, panels, and short courses
- Globally driven
- Aid junior operators, state-owned enterprises, regulators and other stakeholders
- Cooperate with IAEA's efforts



IFSOUP Results

- Good examples exist
- Challenge to disseminate
- Further discussion of ISL technical issues
- Communication constraint
- Further discussion of specific needs of indigenous peoples

IIIRM - IFSOUP Workshop 30 June 2009
American Indian Tribes and Canadian First Nations and the Production of Uranium



- Roles for Indian Tribes, First Nations, and Other Indigenous Peoples
- What Tribes Want; What Tribes Can Do: Questions and Answers on Sacred Sites, Tribal-Corporate Relations, Workforce Development, and Other Issues
- Uranium Mine Reclamation: The Herault Experience
- Cleaning Up Oklahoma: The OERB Voluntary Abandoned Well Site Cleanup Program
- ICMM Guidance on Mining and Indigenous Peoples
- Benefits Sharing: Canadian First Nations Experience
- What Industry and Agencies Want; What Industry and Agencies Can Do: Questions and Answers on Sacred Sites, Consultation, Benefits Sharing, Tribal-Corporate Relations, Workforce Development, and Other Issues

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IFSOUP
International Forum on Sustainable Options for Uranium Production

NRC Coordination with Federal Agencies on Uranium Recovery Applications

Andrea Kock, Chief, Environmental Review Branch
USNRC
July 1, 2009

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Guidance on Interactions with other Agencies

- NRC guidance
- NEPA
- Recent Interactions
  - Targeted scoping
  - BLM
  - EPA
  - Forest Service
  - WYDEQ
  - Native American Tribes

How NRC Interacts with other Federal Agencies

- Scoping
- Consultation letters
- Telecons
- Informal information Sharing
- Cooperating agencies
  - MOUs
  - MOAs/PAs

NRC/BLM MOU

- BACKGROUND

  Concurrent NEPA reviews conducted by each agency on same project discovered during visits to BLM field offices in September 2008 to discuss the GEIS

- NEED

  Numerous proposed new uranium recovery facilities located on BLM-administered land

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Purposes of the MOU

- Provide an efficient means of fulfilling NEPA requirements
- Encourage routine communication
- Advance notice of agency actions
- Provide framework for exchange of data
- Establish roles and responsibilities

Status of MOU

- Draft MOU sent to BLM on January 26 2009
- Revised draft MOU submitted to BLM by NRC on May 20, 2009
- Meeting held June 10 to discuss feasibility of issuing one NEPA document
- Telecon scheduled June 29 to discuss final comments
- Letters to BLM field offices

Progress

- Letters to BLM field offices
- Share future agency actions
- Routine communication with field offices
- MOU in final stages
  - Telecon June 30 2009

NRC/BLM MOU CONTENTS

- PURPOSE
- LEGAL AUTHORITIES
- ROLES AND RESPONSIBILITIES
- COORDINATION
  - Advance notice of uranium recovery license applications/Plans of Operation
  - Exchange data and information
  - Steering Committee
  - Lead/Cooperating Agency Status
  - NEPA Implementation and Review Process
  - Schedules and Interagency Communication

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Challenges

- Different timelines
- Different purpose and need/alternatives
- Agency resources
- Resource areas reviewed
- Different agency roles
- Different procedures for completing documents

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Expected Outcome

- Increase communication
- Advance notice of expected actions
- Sharing of early drafts of NEPA documents
- Efficiencies in NEPA process
- Continue to explore possibility of only one NEPA document

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Next Steps

- Finalize BLM/NRC MOU
- Protocol established to delineate NRC roles and responsibilities regarding interacting with agencies
- Continue to be proactive in engaging other federal agencies

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Takeaways

- NRC is committed to open communication with other agencies.
- The impacts of differences in the roles and responsibilities, and timelines of agencies must be recognized
- NRC and BLM remain committed to coordination and completion of an MOU
- Information will continue to be shared where possible to promote efficiencies

UPDATE OF URANIUM RECOVERY ACTIVITIES

Bill von Till

Uranium Recovery Licensing Branch

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Overview

- Staff
- New Licensing
- Operating Facilities
- Hearings
- Outreach
- Uranium Recovery Decommissioning
- Well Field Installation
- Challenges

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URLB Staff
Operating Sites and New Licensing

- Bill von Till, Chief
- Stephen J. Cohen, Team Leader New Licensing
- Ron Linton, Sr. Hydrogeologist/PM
- Mike Fliegel, Sr. PM
- Elise Striz, Hydrogeologist
- Douglas Mandeville, Geotechnical Engineer/PM
- Betty Garrett, Licensing Assistant
- James Webb, Health Physicist
- Dan Gillen, Consultant
- Rick Weller, Consultant
- Tom Lancaster, Hydrogeologist
- John Saxton, Hydrogeologist
- Tanya Oxenberg, Health Physicist
- Hydrogeologist - Vacant
- Chemical Engineer - Vacant

UR Decommissioning Staff

Materials Decommissioning Branch

- Rebecca Tadesse, Chief
- Tom McLaughlin, PM – ExxonMobil, Ambrosia Lake, Bear Creek, ANC Gas Hills
- Ken Kalman – PM – Sequoyah Fuels
- Ted Carter – PM – RMD/WRT, Pathfinder sites
- Lifeng Guo - Hydrogeologist

Reactor Decommissioning Branch

- Drew Persinko – Chief
- John Buckley – PM – Homestake
- Jon Peckenpaugh – Hydrogeology
- Tom Youngblood – Health Physics

Special Projects Branch

- Lydia Chang, Chief
- Richard Chang – PM – Western Nuclear, Umetco
- Yolande Norman – PM – UNC Churchrock
- Ted Johnson – Erosion Control and Surface Water Hydrology

Agreement State sites – Dennis Sollenberger and Bill Rautzen

New Licensing

- Received 5 New ISR applications
- Received 2 expansion amendments (ISR) and one restart application (ISR)
- RAIs issued for first three, acceptance review complete for two
- Expecting 18 more new and expansion applications FY2009 – FY2012 (see table next slide)

Complete Applications Acceptance Reviews

- 90 day Review
  - Reduce Inefficiency
  - Reduce requests for additional information
  - Maintain review schedules
- Site Characterization
  - Need enough detail for full technical and environmental analysis
- Lessons Learned in Panel Discussion

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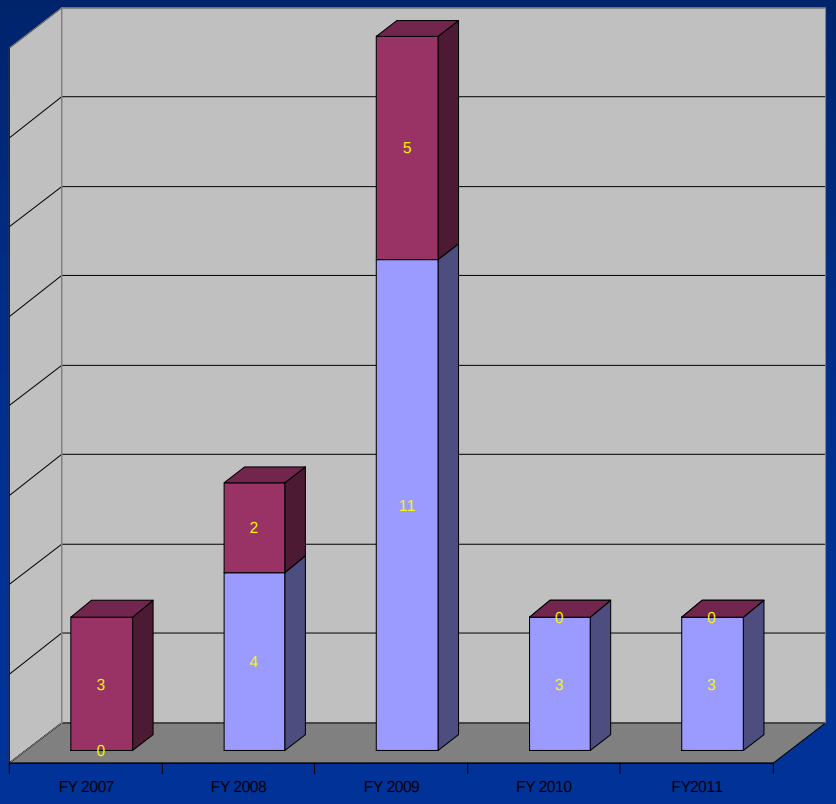
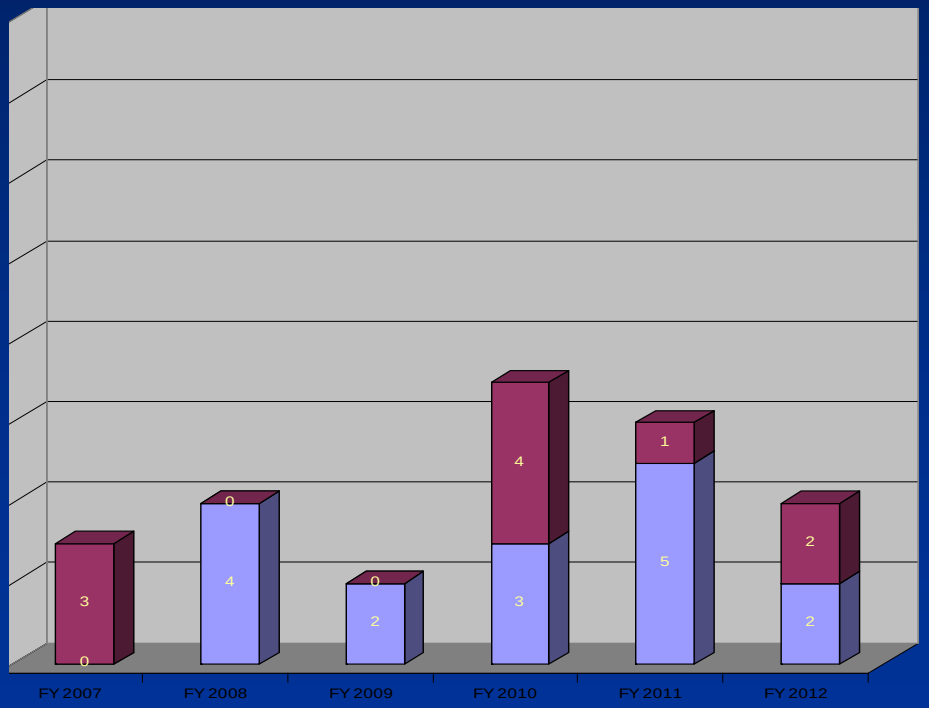
Expected Uranium Recovery Facility Applications / Restarts / Expansions					
Company	**Site**	**Design type**	**Estimated Application Date**	**State**	**Letter of Intent**
Fiscal 2007 Applications					
Cogema	Christensen Ranch	ISL - Restart	Rec. 4/07, Comp. 9/08	WY	None
Cameco (Crow Butte Resources, Inc.)	North Trend	ISL - Expansion	Received June 2007	NE	None
Cameco (Crow Butte Resources, Inc.)	Plant Upgrade	ISL - Expansion	Rec. 10/06, Comp. 12/07	NE	None
Fiscal 2008 Applications					
Lost Creek ISR, LLC	Lost Creek	ISL - New	Resubmitted Mar 2008	WY	*05/23/07*
Uranerz Energy Corp.	Hank and Nichols	ISL - New	Received December 2007	WY	*06/27/07*
Uranium One (Energy Metals Corporation)	Moore Ranch	ISL - New	Received October 2007	WY	*05/31/07*
Uranium One (Energy Metals Corporation)	Jab and Antelope	ISL - New	Received September 2008	WY	*05/31/07*
Fiscal 2009 Applications					
Powertech Uranium Corporation	Dewey Burdock	ISL - New	Received 2/27/09	SD	*01/26/07*
Uranium One (Energy Metals Corporation)	Ludeman	ISL - New	Jul-09	WY	*02/26/09*
Fiscal 2010 Applications					
Lost Creek ISR, LLC	Lost Creek	ISL - Expansion	Nov-09	WY	*03/21/08*
UR-Energy Corp.	Lost Soldier	ISL - Expansion	Nov-09	WY	*03/02/09*
Uranium One (Energy Metals)	Allemand-Ross	ISL-Expansion	Dec-09	WY	*02/26/09*
Neutron Energy	Marquez	Conv. - New	Mar-10	NM	*03/25/08*
Cameco (Crow Butte Resources, Inc.)	Three Crow	ISL - Expansion	Mar-10	NE	*03/04/09*
Rio Grande Resources	Mt. Taylor	Conv. - New	Apr-10	NM	*03/21/08*
Strathmore Minerals Corporation	Roca Honda	Conv. - New	Sep-10	NM	*04/23/07*
Fiscal 2011 Applications					
Concentric	Yavapai County	Conv. - New	Oct-10	AZ	*03/20/08*
Strathmore Minerals Corporation	Reno Creek	ISL - New	Mar-11	WY	*03/18/09*
Cameco (Power Resources, Inc.)	Smith Ranch/Highland CPP	ISL - Expansion	FY 2011	WY	*03/20/08*
Wildhorse Energy	West Alkali Creek	ISL - New	Dec-10	WY	*03/20/08*
Uranium Energy Corporation	Grants Ridge	Heap Leach - New	Jan-11	NM	*02/22/08*
Wildhorse Energy	Sweetwater	ISL and Conv. - New	May-11	WY	-
Fiscal 2012 Applications					
Cameco (Power Resources, Inc.)	Ruby Ranch	ISL-Expansion	Oct-11	WY	*03/20/08*
Strathmore Minerals Corporation	Gas Hills	Conv. - New	Oct-11	WY	*3/18/2009*
Cameco (Crow Butte Resources, Inc.)	Marsland	ISL - Expansion	Sep-12	NE	*03/04/09*
Uranium King Corporation	Apex Mill	Conv. - New	To Be Determined	NV	*09/27/08*
			6 year projected total reviews = 26		
			Total Uranium Recovery Applications Received = 8		
			Total New Uranium Recovery Applications = 17		
			Total Restart/Expansion Uranium Recovery Applications = 9		

UR Applications

2008 Projection



2009 Projection



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Status of Applications

Site Name	State	Type of Application	Application Received	Acceptance Review Complete	Technical RAIs Sent	Environmental RAIs Sent	Draft SER Complete - Includes Delays	Draft SEIS	SEIS Complete
Moore Ranch	Wyoming	ISL New	10/1/2007	12/20/2007	5/14/2008	3/23/2009	10/2009	10/2009	4/2010
Hank & Nichols	Wyoming	ISL New	12/1/2007	4/18/2008	9/11/2008	3/12/2009	9/2009	10/2009	4/2010
Lost Creek	Wyoming	ISL New	4/17/2008	6/10/2008	11/6/2008	3/16/2009	10/2009	10/2009	4/2010
Jab Antelope	Wyoming	ISL New	9/1/2008	3/9/2009	-	-	-	-	-
Dewey Burdock	S. Dakota	ISL New	2/27/2009	5/27/2009	-	-	-	-	-

Operating Sites and Outreach

- Operating sites – focus on safety and environmental protection – inspections, licensing reviews
- Review of several License Renewal Applications
- Stakeholder interest high
- State and Federal Agency coordination
- Indian Tribe outreach
- Congressional Interest

Hearings and Pending Federal Court Cases

- Hydro Resources Inc. (HRI) ISR, New Mexico – 10th Circuit Federal Court cases
- Tuba City Federal Court Case
- Crow Butte ISR expansion license amendment
- Crow Butte ISR license renewal
- Cogema Hearing requests for license renewal – standing and contentions phase
- TRONOX Case

UR Decommissioning

- **Umetco – Wyoming**
  - **NRC is currently waiting for the results of the licensee's final groundwater sampling event**
  - **NRC is waiting for the Draft LTSP from DOE**
  - **Estimated time for license termination: Calendar Year 2009**
- **Western Nuclear – Wyoming**
  - **NRC is waiting on WNI's response to RAIs sent in early April for their amendment request for revised groundwater protection standards**
  - **Depending on when the RAI responses are received, it is expected that this will be approved by the end of this calendar year**
  - **Estimated time for license termination: Calendar Year 2010**

UR Decommissioning

- **Sequoyah Fuels - OK**
  - **DOE is preparing a long-term surveillance plan.**
  - **Surface Reclamation Plan approved 4/09.**
  - **Additional information needed for Groundwater Corrective Action Plan.**
  - **Surface Reclamation work to begin around 8/09.**
- **Pathfinder Lucky Mc – WY**
  - **In February 2009, NRC staff received for review, the draft DOE Long-Term Surveillance Plan (LTSP) for the Gas Hills North Site (Pathfinder-Lucky Mc) dated January 2009. NRC issued comments to the draft LTSP on May 29, 2009.**
- **Pathfinder Shirley Basin – WY**
  - **Pond 3 reclamation will not occur until the licensee discontinues operation of the 11e.(2) byproduct material disposal area, the date for which has not been determined.**
- **ExxonMobil – WY**
  - **Off-site plume of contamination detected moving southeast into neighboring property and southwest into Pit Lake area. Meeting with licensee and Wyoming DEQ on June 9 to discuss path forward for remediation.**

UR Decommissioning

- **Bear Creek – WY**
  - **DOE is preparing a long-term surveillance plan.**
- **UNC Churchrock - NM**
  - **Semi-annual groundwater monitoring program in progress in all 3 remedial zones. Groundwater extraction system operates only in Zone 3.**
  - **Feasibility study of alternative remedial technologies – due 12/2010**
- **Homestake – NM**
  - **Groundwater reclamation continues at the HMC site under 1989 (as revised in 1998) Corrective Action Plan (CAP). Staff is reviewing revised CAP submitted in December 2006.**
  - **NRC amended HMC license to authorize construction of third evaporation pond in August 2008. HMC waiting for NMED discharge permits to begin construction.**
  - **Groundwater reclamation activities scheduled for completion in 2017.**
- **Rio Algom Ambrosia Lake – NM**
  - **Groundwater reclamation activities scheduled for completion in 2017.**
  - **Settlement of Tailings Cell No. 2 submitted for review. Completion report to be submitted by end of 2010.**

ISR Well Installation
Prior to license vs. after license

- Site Characterization prior to license
  - Geologic characterization
  - Regional pump testing
  - Groundwater quality data collection
  - Exploration drilling
- Well field specific installation after license
  - Installation of recovery and injection wells
  - Monitoring well ring installation
  - Well field specific pump tests from pumping/injection wells to monitoring well ring

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CHALLENGES

- Staffing consistent with applications
- New license applications – uncertainty in how many will be received
- Budget formulation and contracting with dynamic schedules
- Increase in UR legacy site work
- Staffing and consistency of Project Managers