



# Uranium Recovery Licensing Activities

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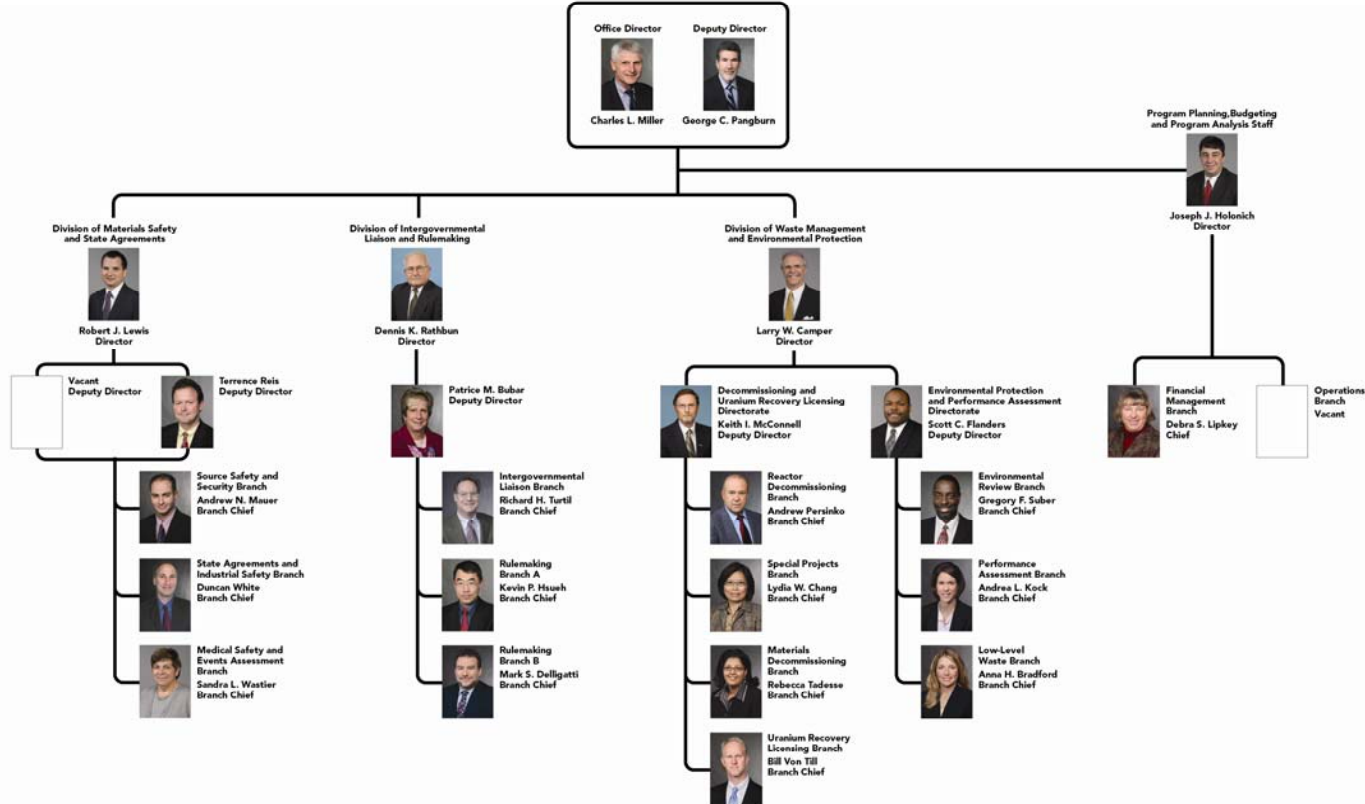
United States Nuclear Regulatory Commission

Protecting People and the Environment

# Organization



## Office of Federal and State Materials and Environmental Management Programs



As of March 2, 2010

## URLB Staff

- Bill von Till, Chief
- Ron Linton, Sr. Hydrogeologist/PM
- Mike Fliegel, Sr. PM
- Stephen J. Cohen, Hydrogeologist/PM
- Elise Striz, Hydrogeologist
- Douglas Mandeville, Geotechnical Engineer
- Betty Garrett, Licensing Assistant
- James Webb, Health Physicist
- Dan Gillen, Consultant
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- Hydrogeologist, TBD
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- Health Physicist, TBD
- Health Physicist, TBD
- Team Leader, TBD

## Environmental Review Branch Staff

- Gregory Suber, Chief
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- Alan Bjornsen, PM
- Allen Fetter, PM
- Gloria Colessa, Team Leader
- Kellee Jameson, NSPDP
- Johari Moore, PM
- James Park, PM
- Ernesto Quinones-Padovani, PM
- Christianne Ridge, Sr. PM
- Behram Shroff, PM
- Patricia Swain, PM
- Project Manager, TBD
- Licensing Assistant, TBD

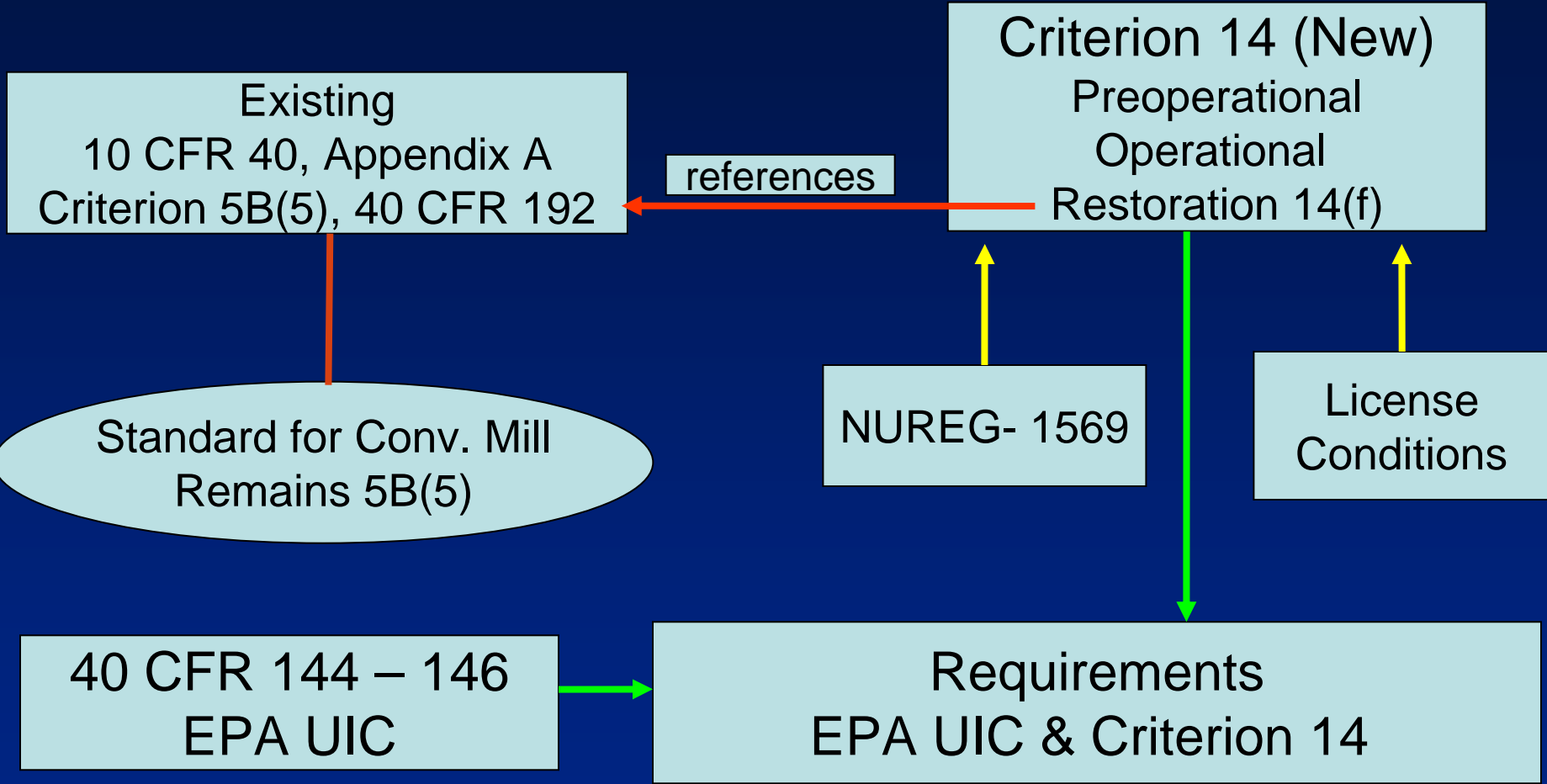
## Current Status

- Interest in US Uranium Recovery High
- International Phenomenon
- International Forum on Sustainable Options for Uranium Production (IFSOU)
- Initiation of GEIS

## Current Status (cont'd.)

- ISL Rulemaking
- Licensing Hearings
- Applicant Meetings
- Congressional Inquiries
- Update Regulatory Guides

# ISL Rulemaking

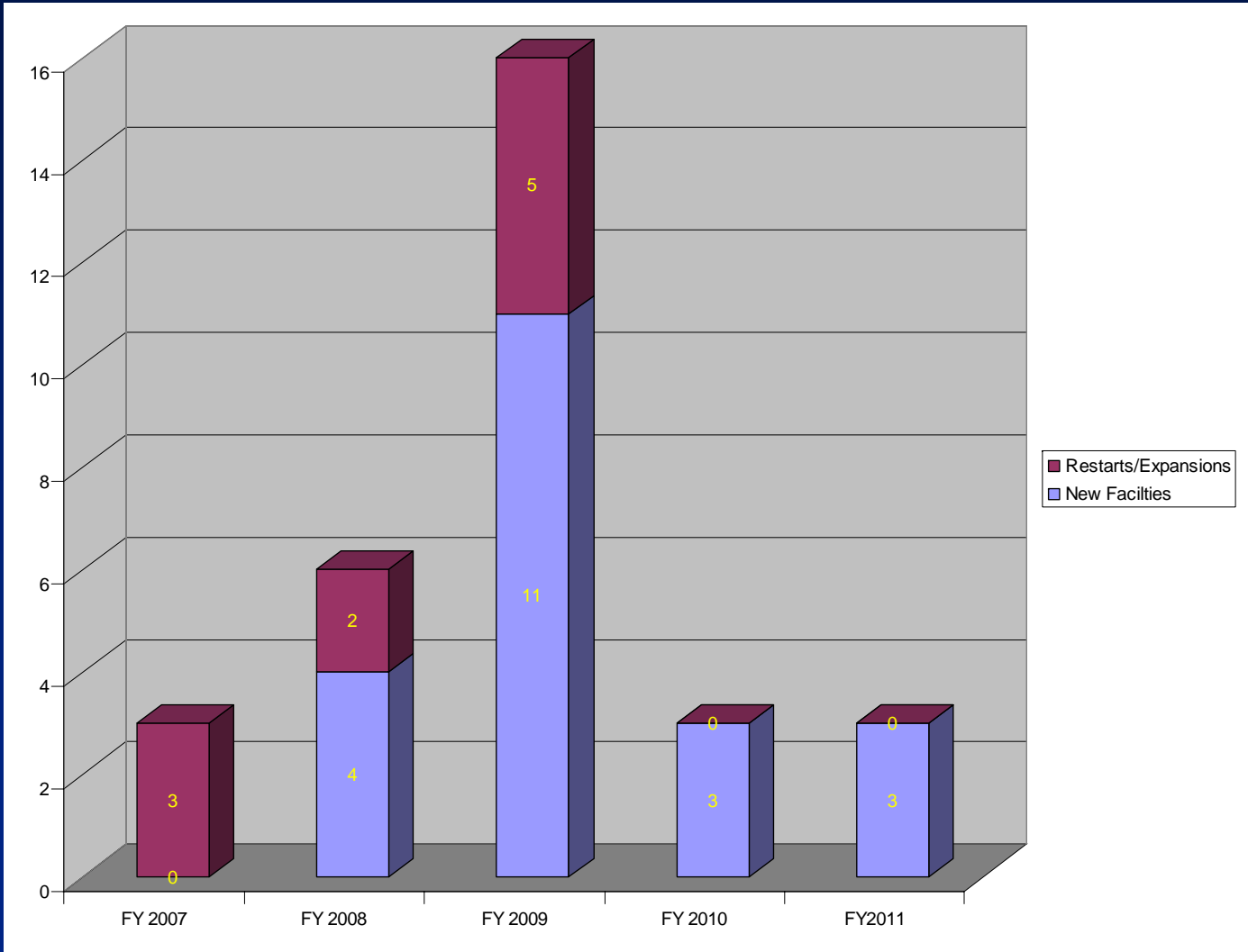


## ISL Ground Water Standards

# Uranium Project Summary

Facility	Quantity
New ISL Facility	14
New Conventional Mill	7
Combined ISL-Conv.	1
ISL Expansion	7
ISL Restart	1
Conventional Restart	1
<b>TOTAL</b>	<b>31</b>

# Uranium Project Summary (cont'd.)



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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	Received April 2007	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	Received October 2007	WY	05/23/07
Urannerz 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	Mid FY 08	WY	05/31/07
Cameco (Power Resources, Inc.)	Gas Hills	ISL - Expansion	Mid FY 08	WY	03/20/08
Kennecott Uranium Co.	Sweetwater	Resin Elution - Expansion	Mid FY 08	WY	03/20/08
Fiscal 2009 Applications					
Cameco (Crow Butte Resources, Inc.)	Three Crow	ISL - Expansion	FY 09	NE	03/20/08
Lost Creek ISR, LLC	Lost Creek	ISL - Expansion	FY09	WY	03/21/08
Powertech Uranium Corporation	Dewey Burdock	ISL - New	FY 09	SD	01/26/07
Cameco (Power Resources, Inc.)	Smith Ranch/Highland CPP	ISL - Expansion	Mid FY 09	WY	03/20/08
Cameco (Power Resources, Inc.)	North Butte	ISL - Expansion	Mid FY 09	WY	03/20/08
Strathmore Minerals Corporation	Roca Honda	Conv. - New	FY 09	NM	04/23/07
Strathmore Minerals Corporation	Sky	ISL - New	FY 09	WY	05/11/07
UR-Energy Corp.	Lost Soldier	ISL - New	Mid FY 09	WY	03/20/08
Uranium Resources, Inc.	Ambrosia Lake	Conv. - Restart	Mid FY 09	NM	03/21/08
Uranium Energy Corporation	Grants Ridge	Heap Leach - New	FY 09	NM	02/22/08
Urannerz Energy Corporation	Collins Draw	ISL - New	FY 09	WY	03/20/08
Rio Grande Resources	Mt. Taylor	Conv. - New	FY 09	NM	03/21/08
Uranium One (Energy Metals Corporation )	Ludeman	ISL - New	FY 09	WY	03/20/08
Uranium One (Energy Metals Corporation )	Allemand-Ross	ISL - New	FY 09	WY	03/20/08
Wildhorse Energy	West Alkali Creek	ISL - New	FY 09	WY	03/20/08
Concentric	Yavapai County	Conv. - New	FY 09	AZ	03/20/08
Fiscal 2010 Applications					
Cameco (Power Resources, Inc.)	Ruby Ranch	ISL - New	FY 10	WY	03/20/08
Neutron Energy	Marquez	Conv. - New	FY 10	NM	03/25/08
Strathmore Minerals Corporation	Reno Creek	ISL - New	FY 10	WY	03/21/08
Fiscal 2011 Applications					
Strathmore Minerals Corporation	Gas Hills	Conv. - New	FY 11	WY	03/21/2008
Bayswater Uranium Corporation	Alzada	ISL - New	FY11	MT	03/27/2008
Wildhorse Energy	Sweetwater	ISL and Conv. - New	FY 11	WY	-
4 year projected total reviews = 31					
Total New Uranium Recovery Applications = 21					
Total Restart/Expansion Uranium Recovery Applications = 10					

## Credible Letters of Intent

- Signed by a Corporate Officer
- Include a Specific Submission Date and Location
- Preliminary Work Completed To Date:
  - Exploration
  - Site Characterization
  - Other Steps to Assure Submission Date is Met

## Industry Actions

- NMA Environmental Report for GEIS
- 3 Applications for New Facilities Received
- 3 Applications for Expansions or Restarts Received
- 27 Letters of Intent/27 Projects

## Status of Applications

- New Facility Applications
  - 2 Acceptance Reviews Complete
  - 1 Acceptance Review in Progress
  - 2 Technical Reviews in Progress
- Expansions/Restarts
  - 1 Amendment Issued
  - 2 Technical Reviews in Progress

## Lessons Learned

- Radiation Protection Must be Properly Addressed
- Hydrogeology
- NRC Budget Cycle
- Peak Licensing Activity in 2009-2010

## The Future

- Stakeholder Outreach
- Beyond FY2011
- Future Congressional interaction
- Hearings

## Challenges

- New License Applications
- Attrition & Recruitment
- Consistency with Staff Contacts
- ISL Rulemaking
- Potential Re-starts and Upgrades
- Fully Address Stakeholder Concerns
- Potential for Hearings

## Conclusions

- Reviewing Applications and Processing SERs
- Addressing Resource Shortfalls
- Licensing Casework Has Grown
- GEIS Has Drawn Mixed Reviews

## Conclusions

- We Are Prepared
- We Utilize an Open Process
- Stakeholder Concerns are Addressed
- Regulatory Actions will Result in Safe Activities