

Uranium Regulatory Developments

Indian Affairs Committee

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Presentation Outline

Regulatory Background

- Purpose

- History

- Authority/Activities/Permitting Process

Uranium Mines and Mills

- Permits

- Issues

Mining Methods

- Conventional

- Open Pit

- In-situ Leach

ISL Process/Permits



Regulatory Purpose

NMED regulates discharges of water contaminants for:

- Protection of Ground Water Quality
- Protection of Surface Water Quality
- Present and foreseeable future use



Regulatory History

Water Quality Act, §§ 74-6-1 through 17 NMSA 1978

- Adopted 1974
- To protect surface and groundwater quality
- Created Water Quality Control Commission



Regulatory History (cont.)

Water Quality Control Commission in 1977 adopted Regulations (20.6.2 NMAC) which:

- Set Ground Water and Surface Water Standards
- Requires discharge permits
- Requires notification and corrective action for leaks, spills and water pollution



NMED Regulatory Authority

NMED is a constituent agency of the WQCC which:

- Issues and enforces Permits for facilities that have the potential to impact ground water quality
- Ensures compliance with ground water quality standards
- Requires abatement of water pollution

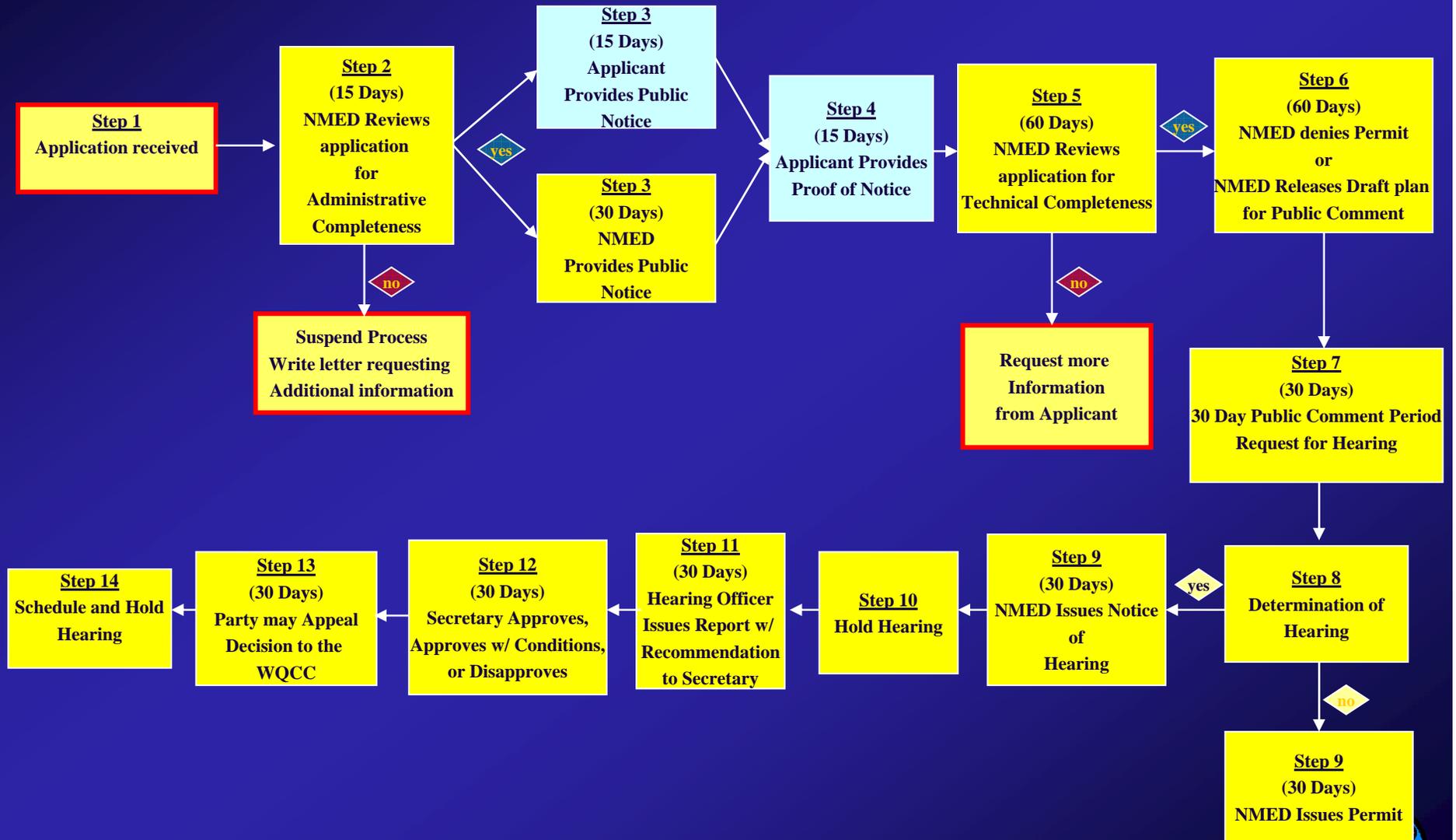


Uranium Regulated Activities

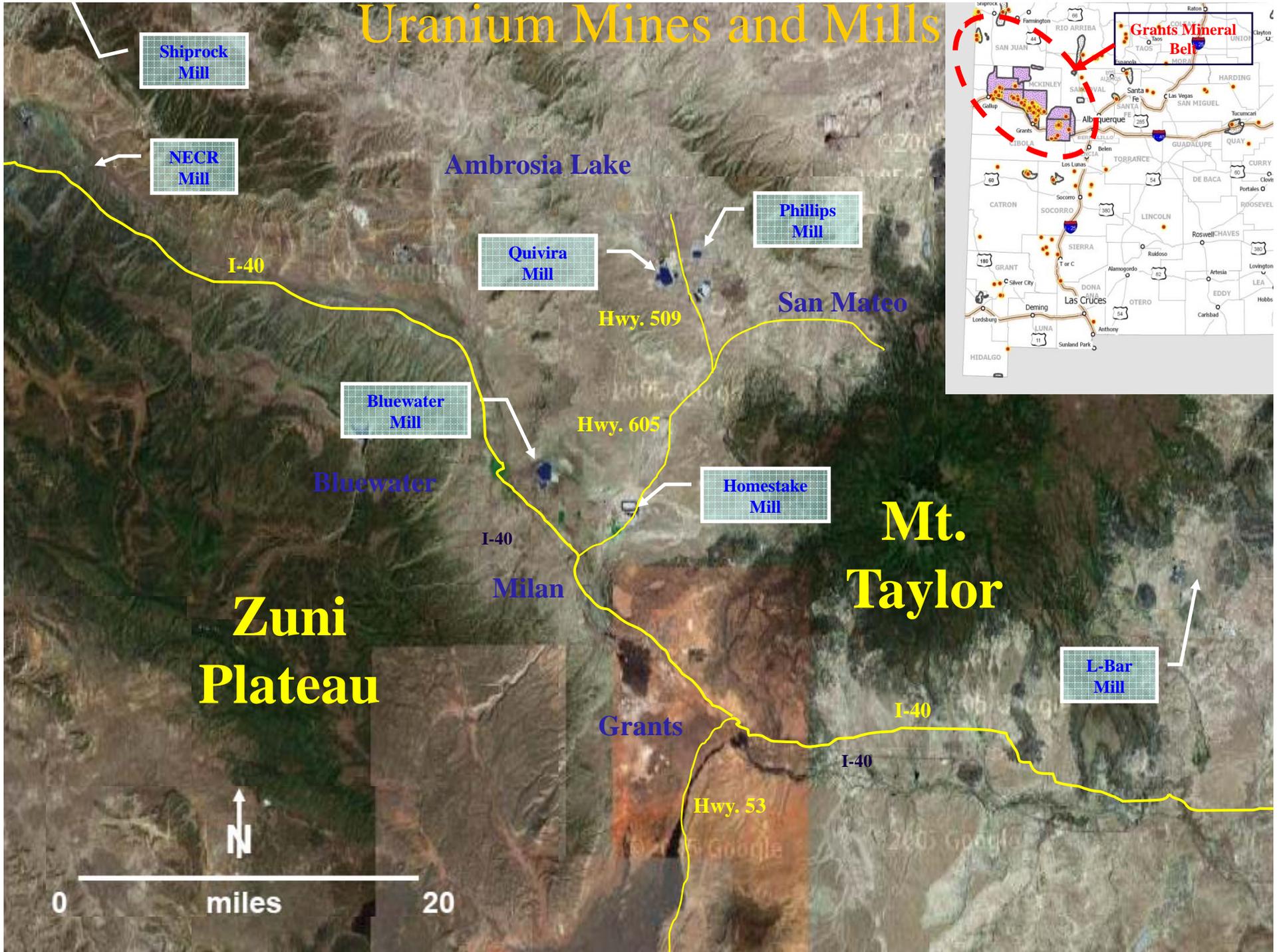
- Uranium Mine Discharge Permits
- Uranium Mill Discharge Permits
- In-situ Leach (ISL) Mining Permits
- Abatement of water pollution



NMED Discharge Permit Process Flow Chart



Uranium Mines and Mills



Uranium Mine and Mill Permits

- No Current Mining or Milling Discharges
- 2 Active Permits
 - Mt. Taylor Mine (renewal application for dewatering/discharge)
 - Rio Algom Mill (demolished but submitted renewal for closure)
- 3 Potential Permits
 - Strathmore Roca Honda
 - Laramide
 - Juan Tafoya



Mine & Mill Permit Issues

- Mine Dewatering Discharges to Surface Water Systems
- Waste Rock Piles
- Mill Tailings
- Tribal Consultation
- Public Participation Process



Mining Methods

Conventional



Mt. Taylor Mine

Open Pit



ISL



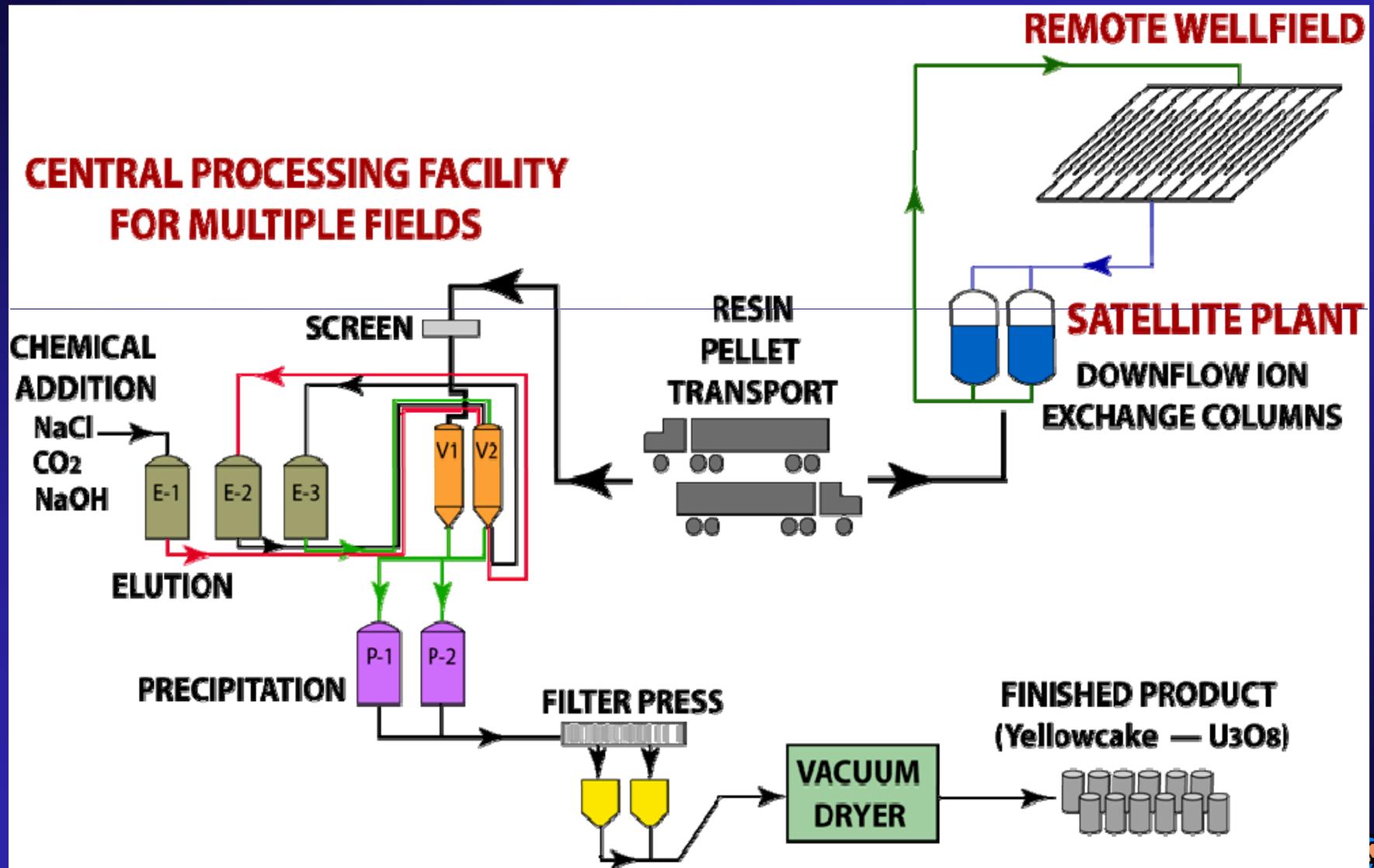
St. Anthony Mine



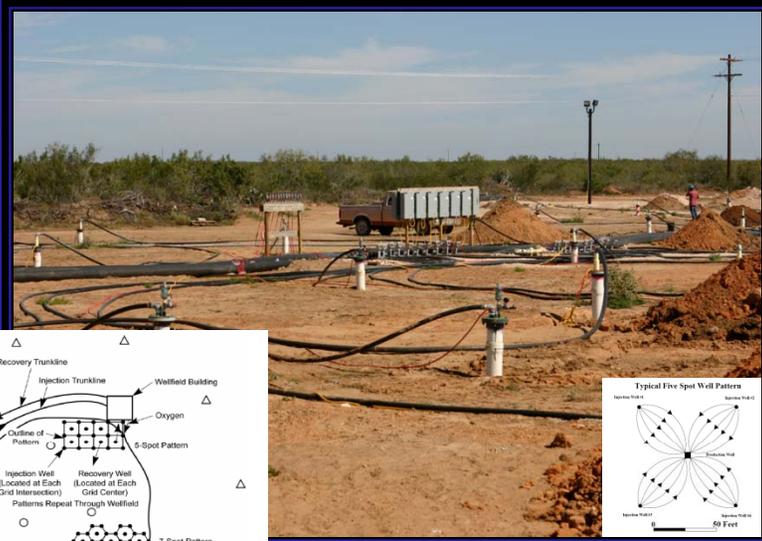
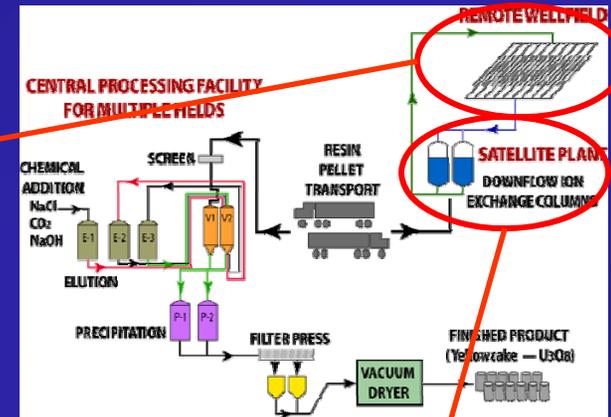
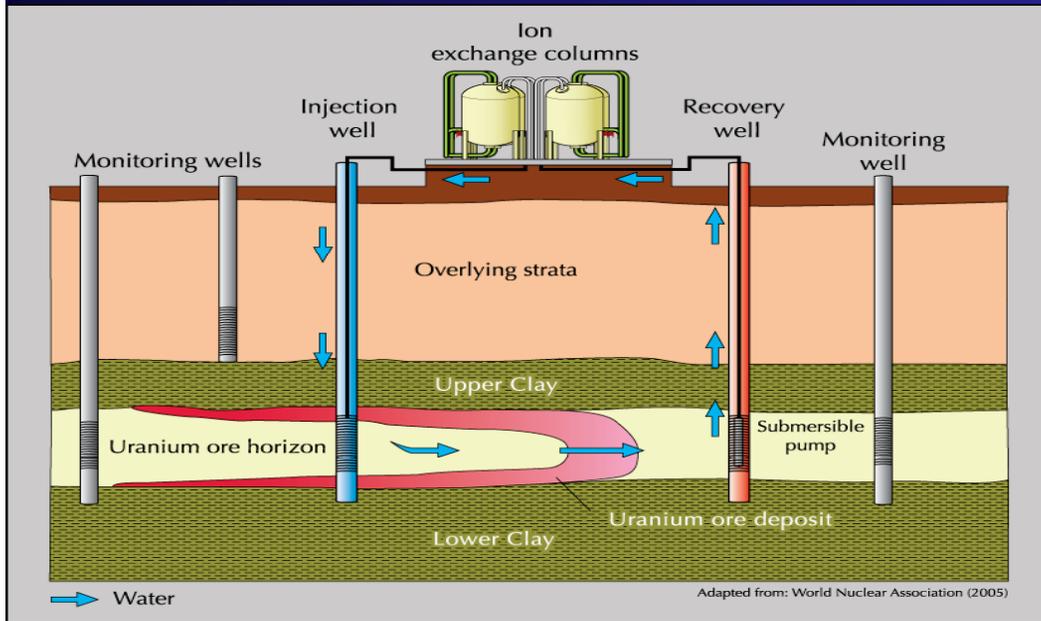
Wyoming



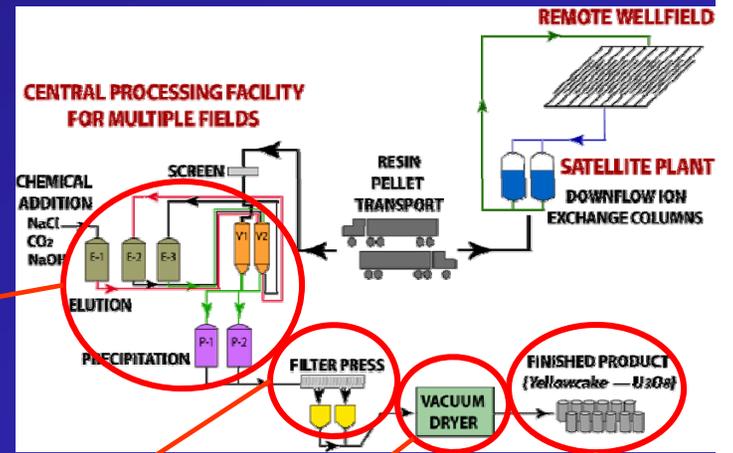
Typical ISL Mining Operation



Wellfield & Satellite Plant



Central Processing Facility



Groundwater Restoration

Groundwater sweep in which both chemical constituents and groundwater are removed from the affected area by pumping selected wells

Groundwater extraction with surface treatment of groundwater before re-injecting into the wells



ISL Permits

1 Current ISL Permit Application for HRI

- 1989 HRI issued Discharge Permit
- 1996 HRI submitted timely DP renewal app.
- Navajo Nation litigation on NMED jurisdiction over Indian Country issues
- Never constructed due to litigation
- 2010 10th Circuit Court of Appeals determined not Indian Country



HRI Permit Status

- Revised Renewal Application submitted April 2011
- Application deemed Administratively Complete
- Notification to Tribal entities completed
- Navajo Nation, Hopi Tribe, and Acoma Pueblo have requested tribal consultation
- NMED currently conducting technical review of application



ISL Permit Considerations

- Protection of drinking water aquifer
- Background water quality
- Aquifer restoration upon completion
- Financial Assurance

