



**Department of Environmental Quality  
Land Quality Division**



# **Wyoming Uranium Recovery Program Update**

**National Mining Association**

**July 19, 2022**

Brandi O'Brien

Wyoming Department of Environmental Quality

Uranium Recovery Program Manager



# LQD's Uranium Recovery Program



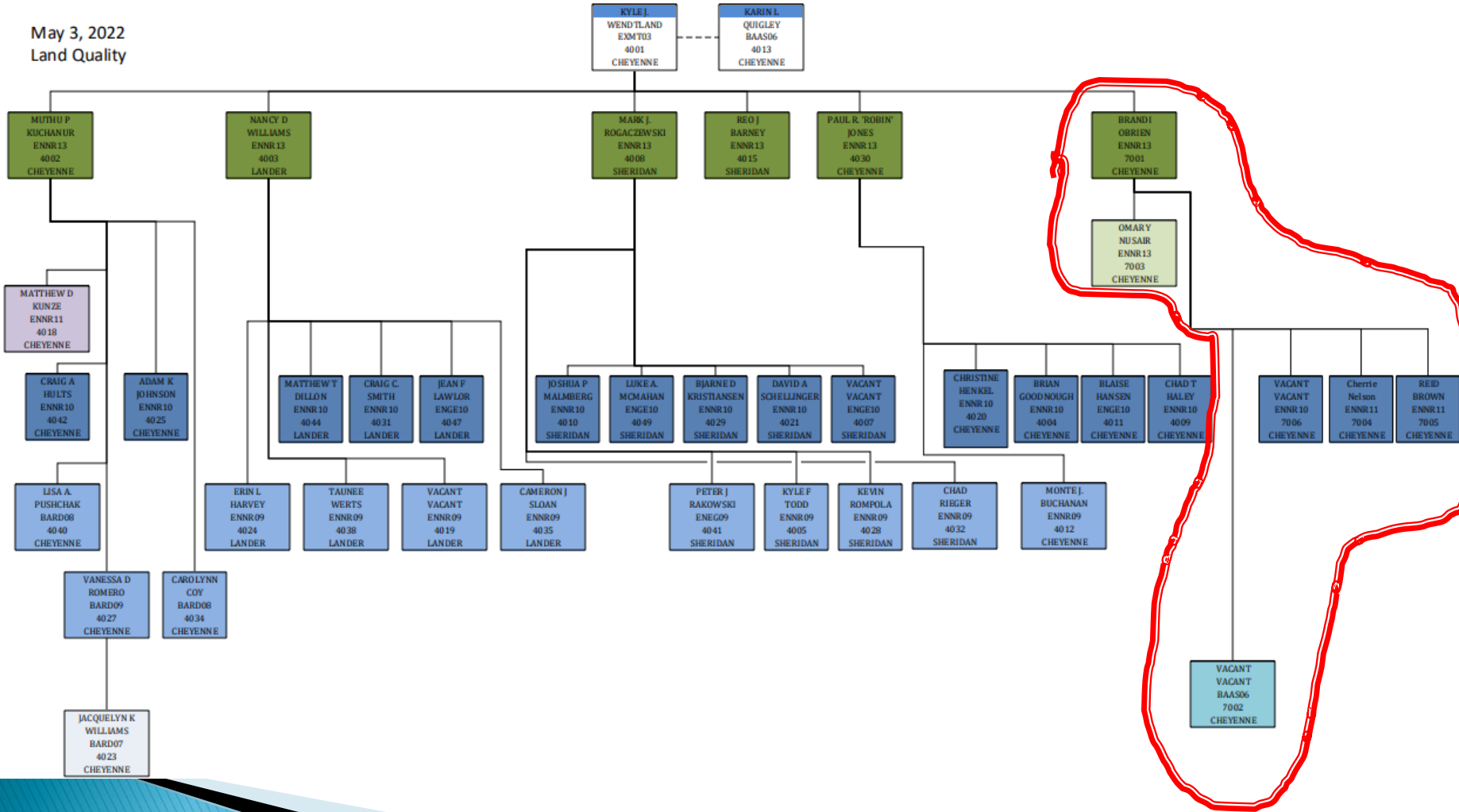
- 5 URP Technical Employees
  - Brandi O'Brien, Uranium Recovery Program Manager
  - Reid Brown, Senior Hydrologist/Geochemist
  - Senior Health Physicist (Vacant)
  - Cherrie Nelson, Health Physicist (in training)
  - Andrew Frazier, Geologist (in training)
- 3 FTE LQD Staff
- 3 Other URP Supported Positions
  - Administrative Assistant (Shared position with LQD)
  - Nicole Budine, Assistant Attorney General for the URP
  - Cheryl Lobb, Paralegal



# LQD & URP

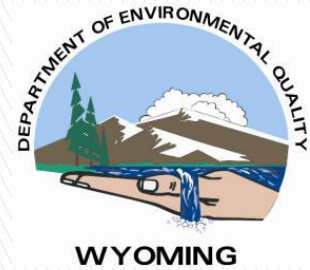


May 3, 2022  
Land Quality





# URP Qualification



- ▶ Background on Uranium Recovery
  - ▶ Code of Federal Regulations
  - ▶ Wyoming State Statutes and Rules and Regulations
  - ▶ Federal and State Regulatory Guidance
  - ▶ Site Familiarization Visit
  - ▶ NRC Management Directives
  - ▶ Directed Review of Selected Uranium Licensing Casework
  - ▶ Formal Training
- ▶ Background on Uranium Recovery
  - ▶ Code of Federal Regulations
  - ▶ Wyoming State Statutes and Rules and Regulations
  - ▶ Federal and State Regulatory Guidance
  - ▶ NRC and URP Inspection Manual
  - ▶ Industry Codes and Standards
  - ▶ Inspection Accompaniments
  - ▶ NRC Management Directives
  - ▶ Review of Significant Events at Uranium Recovery Facilities
  - ▶ Formal Training

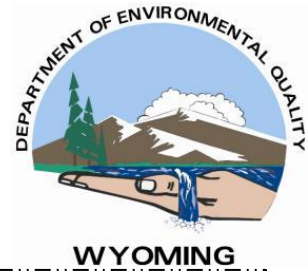
Project Manager/  
Technical Reviewer

Inspector

≈ 1.5 years to complete



# Current Licensees



## Conventional Mill/Tailings

- Anadarko Bear Creek
- ExxonMobil Highland
- Orano LuckyMc
- Umetco Gas Hills
- Pathfinder Shirley Basin North
- Kennecott Sweetwater
- WNI Split Rock

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## In-situ Recovery

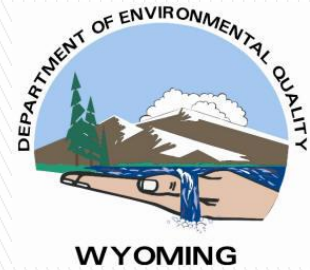
- UR-Energy Lost Creek
- AUC Reno Creek
- Cameco Smith Ranch/Highland
- UEC Uranium Corp. Willow Creek
- Strata Ross
- Energy Fuels Nichols Ranch
- UEC Wyoming Corp. Moore Ranch\*
- UEC Uranium Corp. Ludeman\*
- Pathfinder Shirley Basin ISR\*

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\* Not Yet Constructed



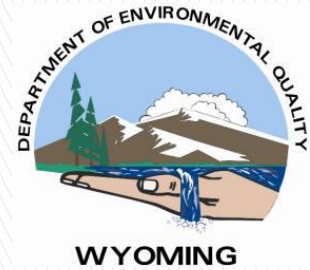
# Licensing Actions Completed



Facility	Action
Sweetwater Mill	Corrective Action Plan Revision
Willow Creek	Soils Decommissioning MU1-9 Addendum - Building Footprints
Willow Creek	Change of Control Request
Moore Ranch	Change of Control Request
Moore Ranch	Name Change
Nichols Ranch	Alternate Decommissioning Schedule
Strata Ross	Oxidant Amendment
Multiple	Reduced Operations Requests



# Current Licensing Actions

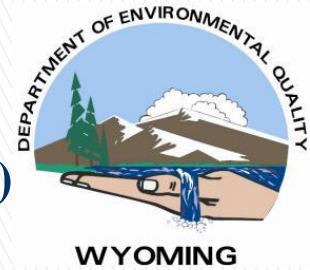


Facility	Action	Status
Bear Creek	Completion Review Report	On Hold
Willow Creek	Name Change	In Final Review
ExxonMobil Highland	ACL Pit Lake	Technical Review
Reno Creek	Expansion and Combination of Permit and License	SDD Finalized
Moore Ranch	License Renewal	Ready for Public Notice
Sweetwater Mill	Public Dose Amendment	Technical Review
Nichols Ranch	License Renewal	Technical Review
Lost Creek	License Renewal	Technical Review





# Current Licensing Actions (continued)

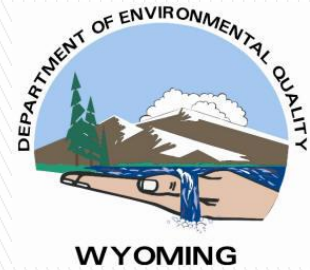


Facility	Action	Status
Willow Creek	Completion Review Report for M1-9	In Final Review
Sweetwater Mill	Request to Modify Groundwater Protection Standards	Technical Review
Strata Ross	Qualified Designee, License Cleanup, DAC Amendment and pond Amendment	In Final Review
Split Rock	Modification to groundwater compliance monitoring program	Out for signature





# Inspections



- Observation – Lowest severity
- Finding – Moderate severity
- Notice of Violation – Highest severity
- Items can rise to the level of a NOV in the following instances
  - Finding is not corrected
  - Potential health and safety significance (human and the environment)
  - Willful or repeated
  - Transboundary Effects
  - In non-compliance with license requirements



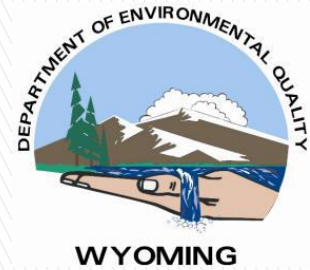
# Inspections



- **URP Activity Summary**
  - 11 Inspection Reports Issued Since August 2021
  - 6 Observations
  - 19 Findings
  - 4 Administrative Action Items (2 NOVs)



# Draft Guidance



- **Radon Public Dose Guidance**
  - Comments received from Industry
  
- **Environmental Monitoring Guidance**
  - (Update to Reg Guide 4.14)
  - NRC comments will be incorporate as necessary
  - Once radon guidance in finalized, this guidance will become priority



# Questions?



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[deq.wyoming.gov/land-quality/uranium/](http://deq.wyoming.gov/land-quality/uranium/)