

Department of Environmental Quality Land Quality Division



Nuclear Regulatory Commission Short- and Long-Term Domestic Uranium Fuel Strategy and NRC's Readiness to Support Licensing Oversight

"Uranium Recovery Program Operations and License Applications in Wyoming"

NRC Commission

December 12, 2023

Kyle Wendtland
Wyoming Department of Environmental Quality
Land Quality Division Administrator



Current Licensees



Conventional Mill/Tailings

- 1) Anadarko Bear Creek
- 2) ExxonMobil Highland
- 3) Orano LuckyMc
- 4) Umetco Gas Hills
- 5) Pathfinder Shirley Basin North
- 6) Kennecott Sweetwater

<u>In-situ Recovery</u>

- 1) UR-Energy Lost Creek
- 2) AUC Reno Creek
- 3) Cameco Smith Ranch/Highland
- 4) UEC Uranium Corp. Willow Creek
- 5) Strata Ross
- 6) Energy Fuels Nichols Ranch
- 7) UEC Wyoming Corp. Moore Ranch
- 8) Pathfinder Shirley Basin ISR



Title II Site Summaries



Company	Facility	Site Status	
Anadarko Petroleum Corporation	Bear Creek	Decommissioning - Near License Termination	
ExxonMobil Corporation	Highland	Decommissioning	
Areva NC, Inc.	Lucky Mc Mill	Decommissioning	
Umetco Minerals Corporation	Gas Hills East	Decommissioning	
Pathfinder Mines Corporation	Shirley Basin North	Accepting 11e.(2) waste	
Kennecott Uranium Company	Sweetwater Mill	Standby - company keeps all equipment functional (4.1 Million Pounds of Yellowcake Annual Production Limit)	
* Western Nuclear Inc.	Split Rock	Decommissioning Complete Site Transferred to Department of Energy for Long Term Care and Maintenance	



ISR Licensed Annual Capacity



Company	Facility	Site Status	Licensed Annual Production Capacity
Cameco Resources	 Smith Ranch-Highland North Butte Gas Hills Ruth Reynolds Ranch 	GW Restoration / Standby GW Restoration / Standby GW Restoration / Standby Not Yet Constructed Not Yet Constructed	Total capacity all sites 5.5 Million Pounds
Energy Fuels	Nichols Ranch	GW Restoration / Standby	2.0 Million Pounds
Strata Energy Inc.	Ross Facility	Producing	3.0 Million Pounds
UEC Wyoming Corp.	1) Moore Ranch	Not Yet Constructed	3.0 Million Pounds



ISR Licensed Annual Capacity (Continued)



Company	Facility	Site Status	Licensed Annual Production Capacity
(continued) UEC Uranium Corp.	2) Willow Creek*Christensen Ranch /Irigary3) Ludeman	GW Restoration / Standby Not Yet Constructed	2.5 Million Pounds
Lost Creek ISR, LLC	Lost Creek	Producing	2.2 Million Pounds
AUC LLC	Reno Creek	Not Yet Constructed	2.0 Million Pounds
Pathfinder Mines Corporation	Shirley Basin ISR	Not Yet Constructed	2.0 Million Pounds







Facility Type	Licensed Annual Production Capacity
Title II Sites (conventional / surface) (Sweetwater)	4.1 Million Pounds
Producing (ISR) (Ross, Lost Creek)	5.2 Million Pounds
Standby (ISR) (Smith Ranch-Highland, North Butte, Gas Hills, Nichols Ranch, Willow Creek)	10 Million Pounds
Not Yet Constructed (ISR) (Ruth, Reynolds Ranch, Moore Ranch, Ludeman, Reno Creek, Shirley Basin)	7 Million Pounds
All Licensed Capacity (ISR)	22.2 Million Pounds
All (Title II plus ISR)	26.3 Million Pounds







- Federal Regulatory Actions and Approvals (e.g. timely EPA aquifer exemption approvals)
- Streamline and add certainty to the permitting process (e.g. clarification of EPA's role)
- Streamline and add certainty the NEPA process
- Supply chain and labor challenges
- Technical challenges (expected and unexpected)
- Encourage exploration and new production
- Endangered species
- Litigation



Questions?





deq.wyoming.gov/land-quality/uranium/