Status of the State of Wyoming’s Uranium Recovery Program

National Mining Association

June 03, 2019

Ryan Schierman, Program Manager WYDEQ/LQD
Agreement took effect September 30, 2018

Required 5 separate NRC Commission decisions
- Decision on Partial Agreement
- Decision on American Nuclear Corporation
- Decision on WY Statutes
- Decision to publish staff assessment to FR
- Decision that Agreement is compatible and adequate

Multiple NRC reviews

1st Partial Agreement for radioactive materials solely involved in uranium or thorium recovery operations.
## Projected Standup vs Actual Standup

<table>
<thead>
<tr>
<th></th>
<th>Projected*</th>
<th>Actual</th>
<th>Difference</th>
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<tbody>
<tr>
<td>Time</td>
<td>5 to 6 years</td>
<td>3.6 Years**</td>
<td>1.4– 2.4 years</td>
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<tr>
<td>Cost</td>
<td>$4.2 Million</td>
<td>~$ 1.5 Million</td>
<td>~2.5 Million</td>
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<tr>
<td>Pay Back for Standup</td>
<td>13 years</td>
<td>5 years***</td>
<td>8 years</td>
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*Projected estimates based on information presented at the October 9, 2014 Joint Minerals and Economic Development Committee
** Time calculated from letter of intent sent by Governor Mead on February 27, 2015
***Based on 3 FTE of LQD
LQD’s Uranium Recovery Program

• 10 Full Time Employees (FTE)
  • Ryan Schierman Uranium Recovery Program Manager
  • David Adams CHP, Health Physicist
  • Reid Brown, Hydrologist/Geochemist
  • Brandi O’Brien Health Physicist
  • Alan Thompson PG, Geologist
  • Emily Werner, Administrative
  • Kelly Shaw Assistant Attorney General for the Uranium Recovery Program
  • (3) FTE already in LQD

• Over 2400 hours of formal training to meet NRC equivalent credentials
• Hundreds of hours spent on NRC inspection accompaniments.
Transferred Licensees

1. Cameco- Smith Ranch ISR SUA-1548
2. Uranium One- Willow Creek SUA-1341
3. Ur Energy/Lost Creek- Lost Creek ISR SUA-1598
4. Uranerz-Nichols Ranch ISR SUA-1597
5. Strata Energy-Ross ISR SUA-1601
6. Kennecott- Sweetwater Conventional SUA-1350 (Standby)
7. Uranium One Moore Ranch SUA-1596 (not constructed)
8. AUC Reno Creek SUA-1602 (not constructed)
9. Anadarko, Bear Creek SUA-1310 (Decommissioning)
10. Exxon Mobil Highlands SUA-1139 (Decommissioning)
11. Pathfinder Lucky MC SUA-672 (Decommissioning)
12. Pathfinder Shirley Basin SUA-442 (Active)
13. Umetco Gas Hills East SUA-648 (Decommissioning)
14. Western Nuclear, Split Rock SUA-56 (Decommissioning)
Records

- 165 boxes of historical NRC records
  - All scanned and placed on electronic database.
- 17,000 electronic records
Record Requests

- Available for viewing at the Cheyenne Office or the corresponding field office
- Records request submitted on DEQ webpage
October 2018 initial annual fee collection

2019 FY (Expenditure)
- As of 4/30/19
  - ~55% Site Specific Costs
  - ~11% Indirect Costs
  - ~33% Non Site Specific Costs

2020 FY (Projections)
- Based on expenditures during the 2019 fiscal year the LQD requested annual fee collections for the 2020 fiscal year based on a budget of roughly 1.2 million.
- 2019 Fiscal year budget was based on 1.6 million prorated to 1.2 million.
2018 Coal Organizational Assessment
- 13 recommendations to improve efficiencies
  - Journey Boards
  - Data collection
  - Pre-Application Mtg.
  - Capturing best practices across Division

Journey Board
1. Did I accomplish what I set to accomplish last meeting? If not why, what resources are needed to help accomplish task?

2. What will I accomplish in the next two weeks? What resources will I need to accomplish said task?
Major Licensing Actions

- Uranium One MU 2–6 Groundwater Restoration rec. 9/11/15
  - Uranium One responded to LQD 2nd round of requests for additional information 3/21/19 (Still evaluating)
- Pathfinder Shirley Basin ISR Application rec. 10/1/18
  - LQD reviewed application and sent request for additional information 2/14/19
- Lost Creek KM Horizon and LC East Expansion rec. 10/1/18
  - BLM Record of Decision 3/19/19
  - LQD Permit to Mine and State Decision Document
- Strata Low pH Amendment rec. 10/1/18
  - Draft State Decision Document and Approval for Public Notice 3/22/19
  - Public Comment Ends June 15th 2019
- Western Nuclear Nitrate ACL Rec. 10/1/18
  - License Amendment Approval 4/5/19
- UMETCO Land Use Survey and Groundwater Monitoring Amendment Rec. 10/24/18
  - License Amendment Approval 4/5/19
- Cameco Smith Ranch Mine Unit 1 ACL Rec. 12/5/18
  - Request for additional information 2/3/19
Kennecott Groundwater Plume Report Rec. 12/17/19
  - Request for additional information 4/10/19
Exxon Mobil License Amendment ACL Pit Lake Rec. 4/17/19.
Western Nuclear Selenium ACL Rec. 5/1/19
Completion Review Reports
  - Bear Creek
  - WNI Split Rock
Uranium One Mine Unit 1–9 Final Status Survey
AUC expansion anticipated in 2019
Minor Licensing Actions

- AUC Reno Creek Met Station Discontinuance Rec. 11/5/18
  - Approval 12/13/18
- AUC Combination of NRC TR and Permit to Mine Rec 10/9/18
  - Approval 3/8/18
- Energy Fuels Nichols Ranch NRC and Permit to Mine Combo Rec. 2/26/19
  - Request for additional information 5/20/19
- Anadarko Bear Creek Monitor Well Abandonment Rec. 4/26/19
- Surety Review
When Does a Finding Become an NOV

- Finding not corrected
- Safety and Health Significance, Willful, Repeated
  - May go directly to a NOV if serious in significance
- Transboundary Effects
Guidance

- Wyoming Uranium Workgroup asked the LQD to focus any guidance development on:
  - Updating Regulatory Guide 4.14
    - Developed draft guidance based on recommendations given by ORAU to the NRC
      - Differences in guidance will be discussed in other presentation
    - Received comments from Industry on the guidance
    - Seeking NRC input on the guidance
  - Public Dose Assessments (radon)
    - Have asked industry to provide clear objectives on what the guidance is to address
    - Workshop in July 2019 to discuss acceptable methodology in performing dose assessments.

- ACL Workshop Agreement States June 2019
- 10 CFR Part 40 Revisions– Commented and requested to be part of workgroup per SA–801A
Questions