



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

October 4, 2019

Ryan S. Schierman, Program Manager
Wyoming Department of Environmental Quality
Land Quality Division
200 West 17th Street, 2nd Floor
Cheyenne, WY 82001

Dear Mr. Schierman:

An orientation meeting with Wyoming was held on June 27, 2019. The purpose of this meeting was to review and discuss the implementation of Wyoming's Agreement State program. The U.S. Nuclear Regulatory Commission (NRC) was represented by Stephen Poy from NRC's Office of Nuclear Materials Safety and Safeguards and me.

I have completed and enclosed a general meeting summary. If you feel that our comments, conclusions, or actions to be taken do not accurately summarize the meeting discussion, or have any additional remarks about the meeting in general, please contact me at (817) 200-1143 or via email at Randy.Erickson@nrc.gov to discuss your concerns.

Sincerely,

/RA/

Randy Erickson
Regional State Agreements Officer

Enclosure:
Orientation Meeting Summary for Wyoming

SUBJECT: WYOMING ORIENTATION MEETING SUMMARY

DISTRIBUTION:

Michael Hay, DNMS, RIV
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Jackie Cook, DNMS, RIV
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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
ORIENTATION MEETING WITH THE STATE OF WYOMING

June 27, 2019

PERIODIC MEETING PARTICIPANTS

NRC

- Randy Erickson, State Agreements Officer, NRC Region IV
- Stephen Poy, Project Manager, Agreement States Program Branch

State of Wyoming

- Ryan Schierman, Program Manager
- Reid Brown, Hydrologist / Geochemist
- Alan Thompson, Geologist

Wyoming Orientation Meeting Summary

1.0 INTRODUCTION

This report presents the results of the orientation meeting held between the U.S. Nuclear Regulatory Commission (NRC) and the State of Wyoming. The meeting was held on June 27, 2019. The meeting was conducted in accordance with NMSS Procedure SA-116 "Periodic Meetings between IMPEP Reviews," dated June 3, 2009.

The Wyoming Agreement State Program is administered by the Uranium Recovery Program. The Uranium Recovery Program is in the Land Quality Division within the Department of Environmental Quality. At the time of the meeting, the Wyoming Agreement State Program regulated 14 licensed sites. The Program is funded through fee collection with a dedicated fund. The meeting focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Wyoming.

2.0 NON-COMMON PERFORMANCE INDICATORS

Typically, five common performance indicators are used to review the NRC Regional Offices and Agreement State radioactive materials programs during an IMPEP review. These indicators are: (1) Technical Staffing and Training, (2) Status of Materials Inspection Program, (3) Technical Quality of Inspections, (4) Technical Quality of Licensing Actions, and (5) Technical Quality of Incident and Allegation Activities.

In addition, four non-common performance indicators are also used to review Agreement State programs. These indicators are: (1) Compatibility Requirements, (2) Sealed Source and Device (SS&D) Evaluation Program, (3) Low-Level Radioactive Waste Disposal (LLRW) Program, and (4) Uranium Recovery (UR) Program.

Because the Agreement between the NRC and the State of Wyoming limits the State's authority to the regulation of uranium recovery facilities, no common indicators apply. However, two non-common indicators are applicable to the Wyoming Agreement and include Compatibility Requirements and Uranium Recovery Program. Each of the indicators below apply only to the Uranium Recovery Program.

2.1 Technical Staffing and Training

The Wyoming Agreement State program is made up of 10 FTE (5 technical staff) including one Program Manager, two health physicists, one geologist, one hydrologist/geochemist, and one administrative staff. The Program funds three additional individuals (vegetation and groundwater staff) who they can access when needed. These individuals were already in the Land Quality Division prior to program inception. Additionally, the Program also funds the services of a staff attorney and paralegal to assist the Program in addition to existing program staff.

Wyoming Orientation Meeting Summary

No individuals have left the program since becoming an Agreement State. The Program is fully staffed, and the technical staff have attended over 2400 hours of combined technical training. Wyoming has a training program that is equivalent to NRC's Inspection Manual Chapter (IMC) 1248, Appendix H, Uranium Recovery Inspector and Appendix I, Uranium Recovery Project Manager/Technical Reviewer.

2.2 Status of the Materials Inspection Program

Since establishing the Program on October 1, 2018, they have performed 9 inspections. No inspections have been performed late. The average time for inspection reports to be sent to licensees has been 23.7 days.

2.3 Technical Quality of Inspections

The Program reported that inspections are thorough and complete. Findings noted during inspections are technically sound and supported based on regulatory requirements and health physics principals. In the 9 inspections performed to date, the Program identified 11 findings. None of the findings rose to the level of a violation so no violations have been issued.

During inspections inspectors noted multiple instances of 11e(2) shipments being shipped incorrectly. In those cases where uranium daughters were out of secular equilibrium, inspectors found that the licensee was shipping the material as natural uranium. When this was noted, inspectors developed a DOT calculator to assist licensees to correctly categorize and ship the waste. As of the date of the meeting, two inspector accompaniments have been performed.

2.4 Technical Quality of Licensing Actions

The Program currently has 14 licenses. Since inception, the Program reported they have completed four licensing actions with 10 additional licensing actions currently in progress. Licensing actions vary based on the action requested. Non-Significant Revisions (NSR) are minor license revisions. Major revisions are larger more complex license revisions. The Program has set licensing metrics including 90 days to complete an initial completeness review of the application followed by 150 days to complete the initial technical review of a new application. If the Program needs to request additional information, they have 30 days to get requests for additional information to licensees.

2.5 Technical Quality of Incident and Allegation Activities

The Program reported that since inception there have been 7 incidents reported. All of those have been spills and excursions and are not reportable to either the HOO or to NMED.

One allegation has been received by the Program which involves falsification of records and was self-reported by the licensee. The Program is investigating the issue.

Wyoming Orientation Meeting Summary

The Program's process is to provide closure letters to concerned individuals in a timely manner. Wyoming protects alleged's identities as allowed by state law.

3.0 Compatibility Requirements

One legislative amendment was enacted that affected the Program. HB001 changed Wyoming Statute §35-11-2004(c) to only allow the federal government to approve the bifurcation of the land and the disposed byproduct material by the State. The previous version of the Wyoming Statute could have permitted the bifurcation of the land and the disposed byproduct material and was determined to be not compatible with NRC requirements. The NRC reviewed the legislation and had no comments. This legislation addresses paragraph 1 in Article VIII of the Agreement and resolves the outstanding compatibility issue.

There have been no changes to the Wyoming regulations that affected the Program.

4.0 Status of Uranium Recovery Sites in Wyoming

Cameco- Smith Ranch ISR SUA-1548 (operating)

Focus is Restoration
Mine Unit 1 ACL

Uranium One- Willow Creek SUA-1341 (operating)

Interim stabilization- standby
Mine Unit 2-6 Groundwater Restoration
Irigaray Final Status Survey

Ur Lost Creek- Lost Creek ISR SUA-1598 (operating)

KM Horizon LC East Expansion
Shirley Basin ISR application

Uranerz-Nichols Ranch ISR SUA-1597(operating)

NRC TR/Permit to Mine Combo

Strata Energy-Ross ISR SUA-1601 (operating)

Low pH lixiviant amendment

Uranium One Moore Ranch SUA-1596 (not constructed)

License Renewal next year

AUC Reno Creek SUA-1602(not constructed)

NRC TR/Permit to Mine Combo
Anticipate expansion application in 2019

Kennecott- Sweetwater Conventional SUA-1350 (Standby)

Groundwater Characterization Report

Wyoming Orientation Meeting Summary

Anadarko, Bear Creek SUA-1310 (Decommissioning)

- No surface reclamation left
- Demonstration of good faith effort for mineral estate
- Monitoring Well Abandonment
- CRR development

Exxon Mobil Highlands SUA-1139 (Decommissioning)

- ACL determination and effects on the LTSB (pit lake)

MC SUA-672 (Decommissioning)

- Well AL-1 Pathfinder Lucky exceedance of the ACL

Pathfinder Shirley Basin SUA-442 (Active)

- Nothing to Report

Umetco Gas Hills East SUA-648 (Decommissioning)

- Monitoring Program Amendment
- Groundwater characterization

Western Nuclear, Split Rock SUA-56(Decommissioning)

- Nitrate ACL
- Selenium ACL
- CRR development

4.0 SUMMARY

The Wyoming Agreement State Program has become a vital part of the Wyoming Department of Environmental Quality. The Program is fully staffed and fully fee funded. Since the Agreement went into effect on September 30, 2018, the Program have become a well-managed and effective regulatory body.

Wyoming stated they do not believe they need a Management Review Board meeting. NRC staff recommends that the Program's first IMPEP takes place in March 2020 as previously scheduled.