



Matt Mead, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Todd Parfitt, Director

April 19, 2013

Mr. John Cash – VP Regulatory Affairs
Exploration and Geology
Lost Creek ISR, LLC
5880 Enterprise Drive, Suite 200
Casper, WY 82609

Re: **Summary of Bi-weekly Inspection of Lost Creek ISR LLC's Permit 788**

Dear Mr. Cash:

On April 18, 2013 a bi-weekly Inspection of the Lost Creek ISR (LCI) project was conducted. The resulting 16-page Inspection report is attached. No action items resulted from this Inspection.

The three (3) action items resulting from the last Inspection have all been addressed or are in the process of being addressed. Those action items were 1) the replacement of topsoil stockpile signs, 2) the construction of toe ditches around topsoil stockpiles, and 3) the seeding of road ditches and topsoil stockpiles.

There are no concerns with the Lost Creek site at this time. The next site Inspection is scheduled for Wednesday May 1, 2013. If there are any questions regarding the enclosed Inspection Memorandum, please contact Melissa Bautz in the Lander Land Quality Division office at (307) 332-3047.

Sincerely,

Melissa L. Bautz, P.G.
Natural Resources Analyst
Land Quality Division - District 2 (Lander)

Enclosure 16-page Inspection Memorandum

MLB:mlb

cc: Mark Newman – BLM – P. O. Box 2407, Rawlins, WY 82301
John Saxton – US Nuclear Regulatory Commission – Federal and State Materials and Environmental Management Programs – Uranium Recovery Licensing Branch, Mail Stop T-8F5, Washington, D.C. 20555-0001
Mark Moxley - WDEQ-LQD, District II → Permit 788 Inspection File
LQD Cheyenne → Permit 788 Inspection File
Chron

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Wyoming Department of Environmental Quality (WDEQ)- Land Quality Division (LQD)
Inspection Memorandum

File: Lost Creek ISR, LLC – Permit 788

Date of Inspection: April 18, 2013

Date of Report: April 19, 2013 *MLB*

Participants: Mike Gaither, Lost Creek ISR/Ur-Energy
Mike Lueders, Mine Manager, Lost Creek ISR/Ur-Energy
Catherine Bull, Project Engineer, Lost Creek ISR/Ur-Energy
Melissa Bautz, WDEQ-Land Quality Division, Geologist

Report Prepared by: Melissa Bautz – WDEQ-Land Quality Division, Geologist

Subject: Bi-weekly Inspection

Background

WDEQ/LQD Permit 788 was approved on October 21, 2011. In the fall of 2012, the Project's EIS was completed and on October 5, 2012 the BLM issued a Record of Decision (ROD) authorizing commencement of work at the Project. Groundbreaking began at the Lost Creek Project on October 8, 2012. Beginning October 16, 2012 LQD District 2 started weekly inspections of site. Beginning February 27, 2013 LQD District reduced the site inspection frequency to bi-weekly (every other week). The last site Inspection was March 27, 2013. The Inspection scheduled for April 10, 2013 was cancelled due to inclement weather and was rescheduled to today.

Inspection

The primary activities occurring at the Lost Creek site during this Inspection were 1) *infrastructure construction* and 2) *Mine Unit 1 pattern area construction*. This Report is divided into those two categories. The temporary office complex (four office trailers) south of the Plant Site is still the official site office for the Lost Creek Project. Anyone visiting the site is expected to check in at this location. Lost Creek ISR (LCI) personnel have requested that all vehicles be backed into the parking spaces outside the offices with the keys left in the vehicle. This is being requested for safety and/or emergency purposes.

Infrastructure Construction

Construction of the Plant Site and the digging of one of the main trunk line trenches were the only *infrastructure* activities occurring during this Inspection.

Plant and Pond Sites

The Pond Site construction (dozer work) was completed in the late fall of 2012. Since the last site Inspection (three weeks ago) the clearing of minor sloughing of the ponds' edges as well as compaction within the ponds has occurred. The next stage of Pond construction includes verification of adequate hydraulic conductivity in the ponds' floors, followed by liner installation, and then installation of the leak detection system. LCI's Catherine Bull anticipates

that the remaining activities related to Pond construction will be started within the next couple of weeks.

Since the last Inspection, the construction of the Plant building has continued to progress. The building is now heated. The installation of the HVAC system is nearly complete and the building's lights and windows are installed. The construction of the offices is in-progress. Outside the Plant Building, the Shop Building has been erected (see Photo Addendum). The construction of secondary containment for propane, gasoline and diesel, and acid is complete as is the footing for the 80,000 gallon water tank for fire suppression. **There are no concerns with the Plant Site.**

Deep Disposal Well (DDW) Sites

DDW-3: The water storage pond at DDW-3 is not currently being used to fill water trucks for drilling. However the pond does have water, in the event extra water is needed. Instead, the tanks at the DDW-4 drill pad are currently being used for drilling water.

DDW-1: This deep disposal well was completed several months ago. It was not inspected during this Inspection.

DDW-4: Several 10,000-gallon water tanks are staged at this drill pad and are currently being used for drilling water. Also staged at the DDW-4 drill pad are several 8' diameter (or larger) corrugated "culverts" (see Photo Addendum) which will be used as "galleries" for accessing the manifolds between the header houses and the main pipeline.

There are no concerns with any of the DDW sites.

Laydown Yard and Temporary fuel storage area

There are no concerns with the temporary fuel storage area or laydown yard.

Erosion Prevention

Topsoil stockpile sloughing: The installation of v-ditches at the base of all of the site's topsoil stockpiles is nearly complete. Only two (2) topsoil stockpiles (at the east end of the site's access road) still require this work. **This addresses one of the action items identified in the last Inspection Report.**

Seeding: During this Inspection Mr. Lueders indicated that the seeding of the site's road ditches has commenced. That effort is about 50% completed. The next areas to be seeded will be the site's topsoil stockpiles. **Spring seeding addresses one of the action items identified in the last Inspection Report.**

Main Trunk Line Trench

The Main Trunk Line Trench has been backfilled from its northernmost extent to south of the access road to about ¼ mile into the MU1 Pattern Area. The backfilling was done after pressure testing of the pipeline was completed. The attached Photo Addendum depicts various locations along the trench. **There are no concerns with the trench.**

Mine Unit 1 Pattern Area Construction

Drilling

Pilot-hole drilling, well-completion, and well-casing continue in the MU1 Pattern Area while exploration/delineation drilling continues in the MU2 and MU3 areas. At the beginning of this Inspection, while still in the office trailer, LCI's Drilling Foreman (Grant) showed me his field book in which mud weights are recorded. The mud weights for well completions have varied from 13.9 to 14.5 ppg over the past several days. It was also noted that the mud balances that are being used at the project are being calibrated on a weekly basis. The mud weights being achieved are within the acceptable range of 13.5 – 15.0 ppg. Many of the mud pits associated with well installation have been backfilled since the last Inspection. The attached Photo Addendum depicts the MU1 Pattern Area.

Wildlife Topics

Ravens

At the end of the last Inspection, LCI's Eric Stonaker indicated that ravens tend to gather at the MU1 pattern area. Eric was curious if there is anything LCI can do to deter them. The BLM and WGFD were presented with this question immediately after the Inspection. Their response was that nothing other than good housekeeping (not leaving food or trash lying around) could be done, given the federally protected status of ravens. The WGFD forwarded the question to the USFWS, however no response has been received from that agency yet. No ravens were noted (by LQD personnel) around the MU1 Pattern Area during this Inspection.

Bond evaluation

The bond was not reevaluated as a result of this Inspection. The currently-posted bond, in the amount of \$8,599,000, is considered adequate.

Summary

This Inspection revealed that LCI personnel are following the approved Operations Plan for Permit 788. **No new action items resulted from this Inspection**

Next Inspection

The next site Inspection is planned for Wednesday May 1, 2013 at about 10:00am. Please do not hesitate to contact Melissa Bautz regarding this Inspection Report at (307) 332-3047.

W/Photo Addendum (Pages 4 – 16)

*****END OF MEMORANDUM*****

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788



Photo Number 1: This depicts the MU1 Pattern area. Many of the mud pits associated with well installation have been backfilled since the last inspection. This view is looking west.



Photo Number 2: This is another view of the MU1 Pattern Area, looking to the south.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 3: This depicts Header House Number 1 in the MU1 Pattern Area. It will be the first to be used when pumping commences.



Photo Number 4: This depicts the new sign for topsoil stockpile number 4 as well as its newly-constructed v-ditch (red line). View is looking east-southeast.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 5: This is another view of the v-ditch around the base of topsoil stockpile 4. The v-ditch is well-constructed.



Photo Number 6: This depicts the large-diameter corrugated "culverts" that are being staged at the DDW-4 drill pad site before they are installed in the MU1 Pattern Area as "galleries" for housing manifolds.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 7: This depicts the main trunk line trench in the MU1 Pattern Area. The trench is in the process of being backfilled after pressure testing on Friday April 12, 2013 revealed the pipeline was sound.



Photo Number 8: This depicts an intersection of the main trunkline (left) and a subsidiary pipe line trench to the MU1 Pattern Area.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 9: This depicts a T-intersection in a piece of 8" diameter pipe.



Photo Number 10: This depicts a trench coming off of the main trunk line trench heading south toward the heart of the MU1 Pattern Area.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 11: This depicts another subsidiary trench in the MU1 Pattern Area.



Photo Number 12: This depicts some tanks with piping installed around their base. This is from the north end of the Plant Building.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 13: This depicts the footings of some tanks mounted onto pilons in the Plant Building.



Photo Number 14: This depicts a doorway inside the Plant Building. Note the containment berm at the foot of the doorway. Every portion of the Plant Building is separated from the adjacent section with a containment berm.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 15: This is a hallway in the office area of the Plant Building. Its concrete floors were being stained during this Inspection.



Photo Number 16: This is a view of the Plant Building looking at its northwest corner. Note the fire hydrant to the right of the center of the photo.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 17: This depicts the shop/maintenance building which is directly north of the Plant Building. This view is looking east. The Plant Building is just off the right edge of this photo.



Photo Number 18: This depicts the southeast corner of the hydrochloric acid storage area which is southeast of the Plant Building (in the background).

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 19: This is a look at the inside of the hydrochloric acid storage area.



Photo Number 20: This depicts the footings for the 80,000 gallon tank that will be staged northwest of the Plant Building for fire suppression.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 21: This depicts the northern pond just east of the Plant Building. Both ponds (north and south) were recently re-graded to clean up minor sloughing that had occurred over the winter. This view is looking east.



Photo Number 22: This depicts the south pond immediately east of the Plant Building. View is looking east.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 23: This is a view looking south at the main trunk line trench just south of where it goes under the site's access road. The trench was recently backfilled at this location. This photo can be compared with Photo Number 6 in the March 27, 2013 Inspection Report, which depicts the same trench when it was still open.



Photo Number 24: This is a view looking north at the main trunk line trench just north of where it goes under the site's access road. The trench was recently backfilled at this location. This photo can be compared with Photo Number 7 in the March 27, 2013 Inspection Report, which depicts the same trench when it was still open.

Photo Addendum to accompany the April 18, 2013 Inspection Report for the Lost Creek Project – Permit 788 cont'd...



Photo Number 25: This depicts the site's access road west of the MU1 Pattern Area where LCI personnel have recently seeded the road's ditches. Note the disc furrows in the ditches. This view is looking west.



Photo Number 26: This is a close-up of the recently seeded road ditch. View is looking west.