



Department of Environmental Quality



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

Matt Mead, Governor

John Corra, Director

January 14, 2011

Mr. Larry Arbogast
Uranium One USA, Inc.
907 N. Poplar Street
Casper, WY 82601

RE: Irigaray-Christensen Operations 2010 Annual Inspection Report, Permit No. 478

Dear Mr. Arbogast:

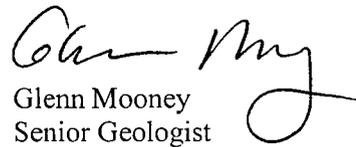
Enclosed is a copy of the report on the 2010 Annual Inspection of the Irigaray-Christensen ISL Operations. This inspection was conducted October 20, 2010, in the presence of Larry Arbogast, Jon Winters and Greg Kruse of Uranium One

A copy of this report will be placed in the permanent inspection file for the Irigaray-Christensen ISL Operations, as will any written comments you may have.

Your cooperation and assistance, as well of that of Messrs. Winter and Kruse are greatly appreciated

Please feel free to call if you have any questions.

Sincerely,


Glenn Mooney
Senior Geologist

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Attachment

cc: Cheyenne file w/attach.
NRC-MD w/attach.

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ANNUAL INSPECTION REPORT

Subject: Uranium One, USA's Irigaray and Christensen In Situ Uranium Operations

Permit No.: 478

Inspectors: ^{GM} Glenn Mooney, Land Quality Division, District III; Amy Boyle, Brian Wood, Land Quality Division, District II

Person Contacted: Larry Arbogast, Jon Winter, Greg Kruse Uranium One, USA

Date of Inspection: October 20, 2010

Introduction

Mining has been completed at both the Irigaray and Christensen operations. With an increase in uranium prices, the staff at Cogema is planning for a restart of mining. The property has been sold to Uranium One, USA. Permit No. 478 was transferred to Uranium One, USA, Inc. on January 25, 2010.

Irigaray Operations

At Irigaray restoration of Wellfield Units 1 through 9 has been completed and acceptance of the groundwater restoration effect was granted on November 1, 2005.

In Units 1 through 6 all wells have been sealed and abandoned and the wellheads removed. The surface piping was removed a number of years ago. The restoration building is currently being used for storage.

In Units 7, 8 and 9, the well field buildings, buried trunklines and manholes leading to the buried trunklines have been removed (Photo No. 1). The buried pipelines leading to each well in Unit 7 have now been removed as well. A few wellheads remain to mark the locations of the buried piping that remains in the ground in Units 8 and 9.

Mr. Arbogast said there were no current plans to retopsoil Mine Units 6-9 where the topsoil was salvaged and stockpiled over 30 years ago.

According to Mr. Arbogast, when the well fields are completely abandoned, the gravel on the unused roads will be reclaimed for use elsewhere.

Most of the plant building has been gutted with the exception of the equipment needed to strip the resin and precipitate the yellowcake which still remains. This elution equipment has been

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refurbished or replaced. The dryer and dry-pack units will be worked on and brought into service soon.

Most of the liners of the evaporation ponds at Irigaray were removed several years ago with the exceptions of Restoration Pond RB and Plant Pond B remain with their liners and contained water at the time of the inspection. Two other ponds, Restoration Pond RA and Pond D, have now been relined with 60-mil HDPE. Geotech fiber underliners were placed under the poly liners to provide secondary liners.

Christensen Operations

Mining was completed at Christensen in June 2000. The dismally low price for uranium at that time led COGEMA to suspend construction of Mining Units 7 and 8 several years ago, as well as all other future mining. The purchase of Irigaray and Christensen by Uranium One USA over a year ago caused remodeling of the plants to intensify and the restart of well field development in Unit 7.

All groundwater restoration and stabilization has been completed, according to the 2006-2007 Annual Report. A report on groundwater restoration has been received and is awaiting review.

The plant equipment is being refurbished in anticipation of restart. The main well field circulation pumps and associated piping has been replaced or refurbished (Photo No. 2) as have the sand filters and tanks. The control room has been remodeled and new equipment installed.

Three reverse osmosis (R/O) units remain in the plant building. Two other R/O units have been sent to the Irigaray plant for storage.

All four of the lined evaporation ponds remain and all contain some water. Mr. Arbogast said work was still on-going to find and repair the leak in Pond 1. (A January 14, 2011, telephone call with Mr. Arbogast revealed that this pond was eventually drained and relined with a HDPE liner like those at Irigaray). The unlined permeate pond was dry.

A topsoil stockpile sign was noted as missing from Topsoil Stockpile No. 7 located in Unit 4.

Christensen Ranch Unit 5 Monitor Well 5MW66

The surface portion of this perimeter monitor well was inspected. The well has been in excursion status since 2004. The well lies downgradient of Unit 5 and portions of the well field extend from its northeast to its south and southwest, partially enclosing it (Photos Nos. 3 and 4).

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Christensen Ranch Well Field Unit 7

The Well Field Unit 7 data package was approved on September 13, 2010, clearing the way for resumption of mining operations late in 2010 or early in 2011. The day of the inspection, a reported 14 drill rigs were running in Unit 7. The well field area has been extensively affected with roads, trenches and drill pads constructed over most of the surface of the unit (Photo No. 5). Some affected areas along the drainage running east to west through the northern portion of Unit 7 have been recontoured and regraded and sediment fences have been placed in strategic areas along the drainage (Photo 5).

Where excavations for mudpit or pipeline trenches have been made, topsoil has been separated from subsoil and placed in separate stockpiles with identification signs on the topsoil (Photos Nos. 9 and 10). Some topsoil has also been salvaged from roadways and module building areas, but in relatively small amounts.

In situ operations are not subject to the same topsoil recovery requirements as surface mining operations, but are required to segregate topsoil from mudpits and building sites and "permanent" life-of-mine) roads. In general, topsoil salvage practices in Unit 7 were satisfactory.

Drilling and installation of injection and production wells were on-going. Stacks of the well casings being used were present and it was confirmed that the casing was SDR-17, the casing grade specified by Permit No. 478 (Photos Nos. 11 and 12).

Cementing of one well was observed and the cement weight was measured. The return cement was measured at 12.2 pounds per gallon, not bad for return cement which can be expected to be diluted somewhat.

The injection and recovery wells being installed in Unit 7 will have new design well boxes. Unlike the older boxes, these will have closed bottoms and sensors in the bottoms of each box that will detect leaking fluids and send alerts to the control room (Photo No. 6).

The module buildings will have grated floors overlying "basements" lined with polymer sheeting that will contain any fluids that might leak from the many plumbing connections in each building. Sensors will be installed in these "basements" to detect any spills.

The construction of monitor wells at Christensen Ranch was discussed. The current method of closing the top of the well with a notched steel plate which supports the weight of the pump and production pipe is not in compliance with Land Quality Division NonCoal Rules and Regulations, Chapter 11, Section 6(b)(ii). This section requires the well opening be closed to

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prevent the introduction of undesirable material into the well. The current practice leaves a gap needed for the power cable but could also allow entry of rodents, snakes and insects.

Mr. Arbogast offered an alternative whereby two plates would be used with the notched sides facing that would cover any gaps. I told him I thought this arrangement would satisfy the regulations.

Deep Disposal Wells

Neither of the deep disposal wells was in use.

Mechanical Integrity Testing

No mechanical integrity testing was observed.

Vegetation

The grass cover in Christensen Ranch Units 2, 3, 4, 5, and 6 was generally good. The isolated and undeveloped Unit 8 was not inspected.

Archeological Site

The archeological site in Unit 6 was reviewed. It appeared undisturbed. The fence was in good repair.

Signs

Permit identification signs carrying the required information were in place along the access roads to both the Irigaray and Christensen Ranch plant areas.

Topsoil identification signs were in place on all topsoil stockpiles seen except that for Topsoil Stockpile No. 7 in Christensen Ranch Unit 4 as noted above.

Bond

The bond for Permit No. 478 is Letter of Credit No BNMCH278567OS written by the Bank of Montreal, Chicago in the amount of \$12,928,432.00. This amount will be reviewed during review of the past several Annual Reports to begin soon.

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Conclusions

The inspection did not find any items out of compliance with the exception of the missing topsoil stockpile identification sign on Unit 4 Stockpile No. 7.

Attachments: photo pages

cc: Cheyenne file w/attach.

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Photo No. 1 Looking northwest to north across Irigaray Well Field Units 9 and 8 where all injection and recover wells have been sealed and the well heads cut off below the ground surface the areas backfilled. Only a few plugged monitor wells remain visible. Work is still on-going to remove the buried piping and wiring in Units 8 and 9.

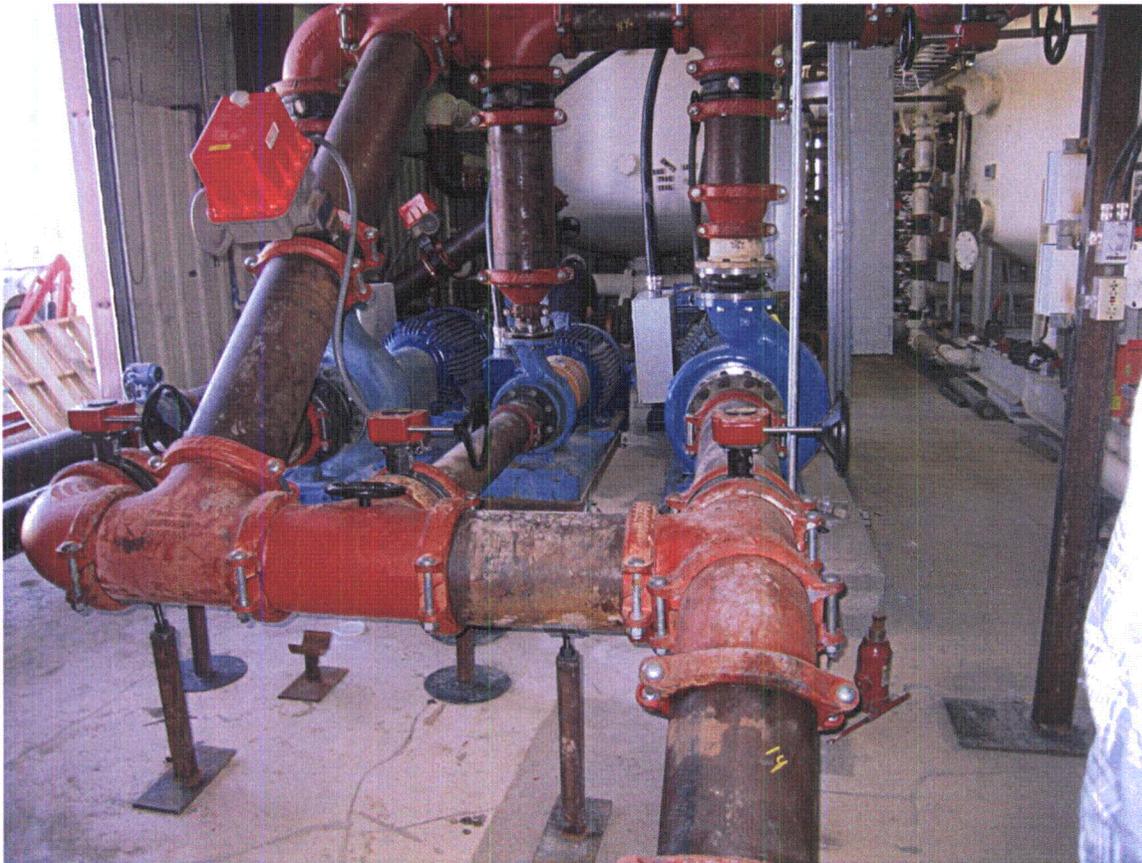


Photo No. 2 View of main circulation pumps and piping in Christensen Ranch satellite plant which have recently been rebuilt, refurbished or replaced.

Photos taken October 20, 2010, by Glenn Mooney

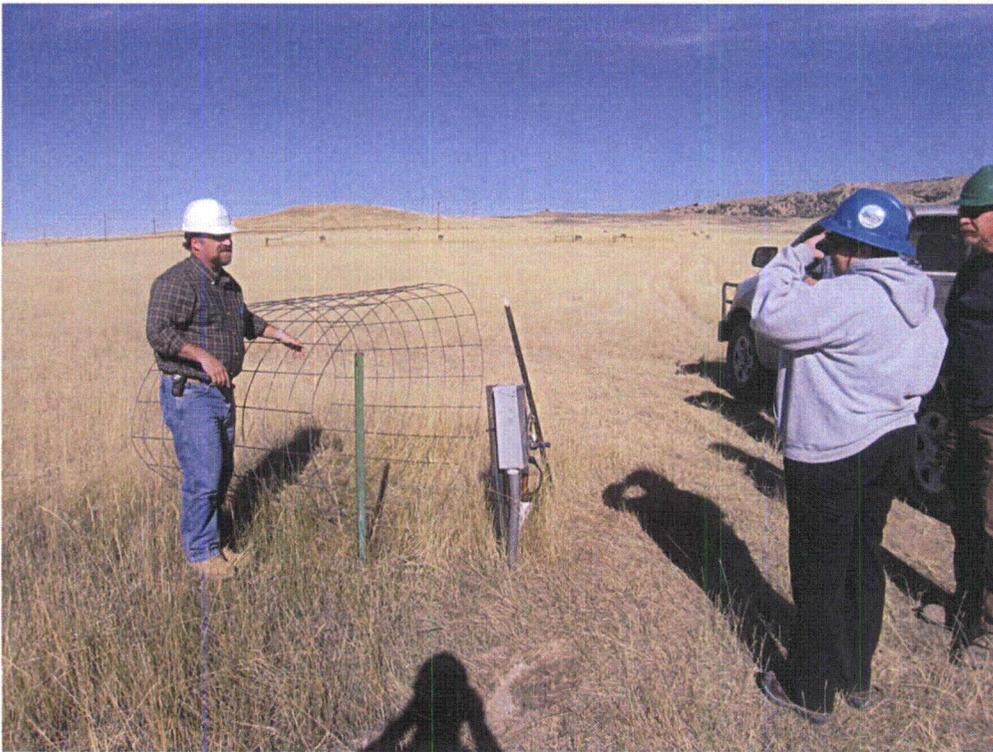


Photo No. 3
Looking at Monitor Well 5MW66 in Christensen Ranch Well Field Unit 5. The northern lobe of Unit 5 can be seen in distance beyond well.

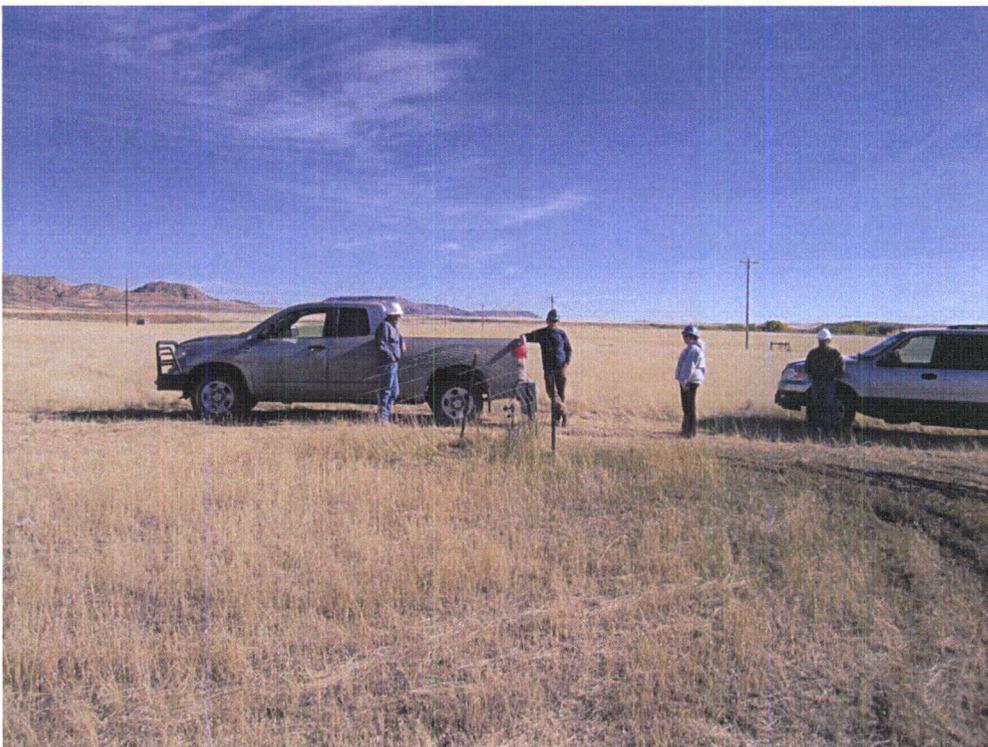


Photo No. 4
Looking south at Monitor Well 5MW66 in Unit 5. Other portions of Unit 5 are partially visible in the left and right distances.



Photo No. 5

Looking east at on-going Well Field Unit 7 development with new roads, well pads and drilling underway. Some regrading of disturbed ground and a sediment fence can be seen in the far left distance.



Photo No. 6

View of new-style well box which covers the well head of injection and production wells. Unlike previous well boxes, this type has a impervious bottom and a sensor that will signal the control room if fluids are detected in the bottom of the box.



Photo No. 7

View of a monitor well with a cover of a style used at Irigaray and Christensen Ranch operations for decades. This style is no longer acceptable because new LQD regulations require well heads to be sealed against contamination and the intrusion of animals and insects.



Photo No. 8

View of a header house under construction. Note the polymer liner at the bottom which will contain any fluids leaked by the plumbing to be installed above in the header house.



Photo No. 9

Looking west along trunkline which will connect a header house with the main trunklines that led to the satellite plant. The trench cut by a backhoe holds both flowlines for the barren and pregnant lixiviant along with oxygen lines and communication lines. Windrows hold the topsoil and subsoil on either side of the trench.



Photo No. 10

View of stockpiles from mudpit used during drilling operations. Topsoil has been placed in smaller stockpile in front marked by small yellow topsoil sign and larger subsoil stockpile in back.



Photo No. 13 View of well cementing operations in Well Field Unit 7. Left truck holds the cementing unit and a bulk truck with cement is located to its right. The truck at right supplies water to mix with the cement.

Photo taken October 20, 2010, by Glenn Mooney