

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

| | | |
|---|-------------------------------------|--|
| Licensee | | |
| 1. Uranium One USA, Inc. | | 3. License Number SUA-1341, Amendment No. 21 |
| 2. 907 N. Poplar Street, Suite 260 Casper, Wyoming 82601 [Applicable Amendment: 17] | | 4. Expiration Date Until terminated or renewed |
| | | 5. Docket No. 40-8502 Reference No. |
| 6. Byproduct Source, and/or Special Nuclear Material | 7. Chemical and/or Physical Form | 8. Maximum amount that Licensee May Possess at Any One Time Under This License |
| Uranium and 11e.(2) byproduct | Unspecified | Unlimited |

SECTION 9: Administrative Conditions

- 9.1 The authorized place of use shall be the licensee's Irigaray and Christensen Ranch Satellite facilities in Johnson and Campbell Counties, Wyoming.
- 9.2 All written notices and reports to the Nuclear Regulatory Commission (NRC) required under this license, shall be sent to the following address: ATTN: Document Control Desk, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs, Washington, DC 20555-0001, Mail Stop T-8-F5, or by express delivery to 11545 Rockville Pike, Rockville, Maryland 20852-2738.

Required telephone notification shall be made to the NRC Operations Center at (301) 816-5100, unless otherwise specified in license conditions.

[Applicable Amendments: 4, 12]

- 9.3 The licensee shall conduct operations in accordance with the commitments, representations, and statements contained in the January 5, 1996, license renewal application submittal as revised by the September 3, 1997, "Responses to NRC Comments on the License Renewal Application for Source Materials License SUA-1341," and as supplemented by the December 13, 1996, submittal, requesting a performance based license condition for approval of the startup of new well fields, including standard operating procedures, and supplemented by the February 4, 2011 and June 17, 2011, submittals requesting approval for the use of sulfuric acid in the yellowcake precipitation process and clarification of radiation safety technician qualifications, and hereinafter referred to as the approved license application. The approved license application is hereby incorporated by reference except where superseded by license conditions below.

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[Applicable Amendment: 20]

The land and structures will be decommissioned according to the Decommissioning Plan submitted December 19, 2000, as revised by submittals dated June 15, June 18, and August 31, 2001 and in accordance with 10 CFR 40.42. Whenever the word "will" is used in the above referenced documents, it shall denote a requirement.

[Applicable Amendments: 4, 6, 13, 20]

9.4 Performance Based License Condition

- a) The licensee may, without obtaining a license amendment pursuant to §40.44, and subject to conditions specified in Part b of this condition:
 - (i) Make changes in the facility as described in the license application (as updated);
 - (ii) Make changes in the procedures as described in the license application (as updated); and
 - (iii) Conduct tests or experiments not described in the license application (as updated).
- b) The licensee shall obtain a license amendment pursuant to §40.44 prior to implementing a proposed change, test, or experiment if the change, test, or experiment would:
 - (i) Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated);
 - (ii) Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated);
 - (iii) Result in more than a minimal increase in the consequences of an accident previously evaluated in the license application (as updated);
 - (iv) Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the license application (as updated);
 - (v) Create a possibility for an accident of a different type than any previously evaluated in the license application (as updated);
 - (vi) Create a possibility for a malfunction of an SSC important to safety with a different result than previously evaluated in the license application (as updated);

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- (vii) Result in a departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report (FSER), or the environmental assessment (EA), or technical evaluation reports (TERs), or other analysis and evaluations for license amendments.
- (viii) The change, test, or experiment is consistent with the NRC conclusions, or the basis of, or analysis leading to the conclusions of, actions, designs, or design configurations analyzed and selected in the site or facility safety evaluation report, TER, and environmental impact statement (EIS), or EAs, including all supplements and amendments, and TERs, EAs, EISs issued with amendments to this license.
- c) The licensee's determinations concerning Part b of this condition, shall be made by a Safety and Environmental Review Panel (SERP). The SERP shall consist of a minimum of three individuals. One member of the SERP shall have expertise in management (e.g., Plant Manager) and shall be responsible for financial approval for changes; one member shall have expertise in operations and/or construction and shall have responsibility for implementing any operational changes; and one member shall be the radiation safety officer (RSO) or equivalent, with the responsibility of assuring changes conform to radiation safety and environmental requirements. Additional members may be included in the SERP, as appropriate, to address technical aspects such as ground water, hydrology, surface water hydrology, specific earth sciences, and other technical disciplines. Temporary members or permanent members, other than the three above-specified individuals, may be consultants.
- d) The licensee shall maintain records of any changes made pursuant to this condition until license termination. These records shall include written safety and environmental evaluations made by the SERP that provide the basis for determining changes are in compliance with Part b of this condition. The licensee shall furnish, in an annual report to the NRC, a description of such changes, tests, or experiments, including a summary of the safety and environmental evaluation of each. In addition, the licensee shall annually submit to the NRC changed pages, which shall include both a change indicator for the area changed, e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed, and a page change identification (date of change or change number or both), to the operations plan and reclamation plan of the approved license application (as updated) to reflect changes made under this condition.

[Applicable Amendments: 4, 6]

- 9.5 The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criterion 9, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination, offsite disposal of radioactive solid process or evaporation pond residues, and ground-water restoration as warranted. The surety shall also include the costs associated with all soil and water sampling analyses necessary to confirm the accomplishment of decontamination.

Within 3 months of NRC approval of a revised decommissioning plan and its cost estimate, the licensee shall submit, for NRC review and approval, a proposed revision to the financial surety arrangement if estimated costs in the newly approved Decommissioning Plan exceed the amount covered in the existing financial surety. The revised surety shall then be in effect within 3 months of written NRC approval.

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Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criterion 9, shall be provided to the NRC by August 18 of each year. Financial surety coverage for the full amount of the NRC-approved decommissioning cost estimate shall not lapse for any time period prior to license termination. If the NRC has not approved a proposed revision 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing arrangement, prior to expiration, for one year. Along with each proposed revision or annual update, the licensee shall submit supporting documentation, showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure.

At least 90 days prior to beginning construction associated with any planned expansion or operational change which was not included in the annual surety update, the licensee shall provide, for NRC approval, an updated surety to cover the expansion or change.

The licensee shall also provide the NRC with copies of surety-related correspondence submitted to the State of Wyoming, a copy of the State's surety review, and the final approved surety arrangement. The licensee must also ensure that the surety, where authorized to be held by the State, expressly identifies the NRC-related portion of the surety and covers the cost of above-ground decommissioning and decontamination, offsite disposal, soil and water sample analyses, and ground-water restoration associated with the site. The basis for the cost estimate is the NRC-approved site closure plan or the NRC-approved revisions to the plan. The reclamation/decommissioning plan, cost estimates, and annual updates should follow the outline in the Appendix C to NUREG-1569 (NRC, 2003), entitled, "Recommended Outline for Site-Specific *In Situ* Leach Facility Reclamation and Stabilization Cost Estimates."

The licensee's currently approved surety, Irrevocable Standby Letter of Credit issued in favor of the State of Wyoming, Department of Environmental Quality (WDEQ) shall be continuously maintained in an amount no less than \$16,308,890, for the purpose of complying with 10 CFR 40, Appendix A, Criterion 9, until a replacement is authorized by both the State of Wyoming and the NRC.

[Applicable Amendments: 1, 2, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 19, 21]

- 9.6 Written standard operating procedures (SOPs) shall be established and followed for all operational process activities involving radioactive materials that are handled, processed, stored, or transported by the licensee at or between the Irigaray and Christensen Ranch sites. SOPs for operational activities shall enumerate pertinent radiation safety practices to be followed in accordance with 10 CFR Part 20. Additionally, written procedures shall be established and followed for non-operational activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations. An approved, up-to-date copy of each written procedure shall be kept in specified locations in the process area to which it applies.

All written procedures for both operational and non-operational activities shall be reviewed and approved in writing by the RSO before implementation and whenever a change in a procedure is proposed to ensure that proper radiation protection principles are being applied. Additionally, the RSO shall perform a documented review of all operating procedures at least annually.

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- 9.7 The licensee shall dispose of 11e.(2) byproduct material, including evaporation pond residues, from the Irigaray and Christensen Ranch Satellite facilities at a site licensed by the NRC or an NRC Agreement State to receive 11e.(2) byproduct material. The licensee shall identify the disposal facility to the NRC in writing. The licensee's approved waste disposal agreement must be maintained onsite. In the event the agreement expires or is terminated, the licensee shall notify the NRC in writing, in accordance with License Condition 9.2, within 7 days after the date of expiration or termination. A new agreement shall be submitted for NRC approval within 90 days after expiration or termination, or the licensee will be prohibited from further lixiviant injection. If the licensee is not able to secure this agreement, then the licensee must increase the surety to include disposal at a commercial 11e.(2) disposal facility.

[Applicable Amendments: 4, 13]

- 9.8 Release of equipment, materials, or packages from the restricted area shall be in accordance with the NRC guidance document entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," dated August 1987, or suitable alternative procedures approved by the NRC prior to any such release, or in accordance with Section 5.1 of the approved Decommissioning Plan.

[Applicable Amendments: 4, 6]

- 9.9 Before engaging in any developmental activity not previously assessed by the NRC, the licensee shall administer a cultural resource inventory. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act of 1966 (as amended) and its implementing regulations (36 CFR Part 800), and the Archaeological Resources Protection Act of 1979 (as amended) and its implementing regulations (43 CFR Part 7).

To ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease. The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance shall occur until the licensee has received authorization from the NRC to proceed.

[Applicable Amendment: 4]

- 9.10 The licensee shall maintain restricted area boundaries at the Irigaray and Christensen Ranch facilities as described in Section 5.8.1 of the approved license application. Additionally, the Irigaray and Christensen Ranch well field buildings shall be restricted, if required, based on the results of radiological surveys.

- 9.11 The licensee is hereby exempted from the requirements of Section 20.1902(e) of 10 CFR 20 for areas within the Irigaray and Christensen Ranch facilities, provided that all entrances to the facility are conspicuously posted in accordance with Section 20.1902(e) and with the words, **"ANY AREA WITHIN THIS FACILITY MAY CONTAIN RADIOACTIVE MATERIAL."**

- 9.12 The RSO shall have the health physics authorities, responsibilities, and technical qualifications identified in Regulatory Guide 8.31. Health Physics Technicians or Radiation Safety Technicians should have qualifications that are equal or equivalent to those specified in Regulatory Guide 8.31, Section 2.4.2 (Revision 1).

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[Applicable Amendment: 20]

- 9.13 Sage Grouse leks at the Irigaray and Christensen Ranch sites shall be monitored on an annual basis. The licensee shall consult with the Fish and Wildlife Service or the Bureau of Land Management for mitigative measures to reduce potential impacts.

[Applicable Amendments: 4, 13]

- 9.14 If any officer, director, board member, employee, or representative of a parent company of Uranium One, Inc., will be appointed, hired, or designated as an officer, board member, or director of the licensee under any NRC license held by Uranium One, Inc. or its subsidiaries, Uranium One, Inc. or its subsidiaries must provide written notice to NRC at least 30 days prior to such appointment, hiring, or designation.

[Applicable Amendment: 18]

SECTION 10: Operations, Controls, Limits, and Restrictions

- 10.1 The licensee shall use a lixiviant composed of native groundwater, with added sodium bicarbonate and/or CO₂ gas and oxygen or hydrogen peroxide, as described in the approved license application.

[Applicable Amendments: 4, 13]

- 10.2 The licensee shall construct all wells in accordance with methods described in Section 3.3.2 of the approved license application.

The licensee shall perform well integrity tests on each injection and production well before the wells are utilized and on wells that have been serviced with equipment or procedures that could damage the well casing. Additionally, each well shall be retested at least once every five years. Integrity tests shall be performed in accordance with Section 3.3.2.2 of the approved license application. Any failed well casing that cannot be repaired to pass the integrity test shall be appropriately plugged and abandoned, using procedures set out in Section 3.3.2 of the approved license application.

[Applicable Amendments: 4, 13]

- 10.3 The licensee shall establish pre-operational baseline water quality data for all production units. Baseline water quality sampling shall provide representative pre-mining ground water quality data and restoration criteria as described in the approved license application. The data shall be from wells established in the mining zone, the mining zone perimeter, the upper aquifer and the lower aquifer where present, with spacing and locations as specified in the approved license application. The data shall, at a minimum, consist of the sample analyses shown in Table 5.25 of Section 5.8.2.2 of the approved license application.

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The wells used for obtaining baseline ground water quality in current and future production areas shall be established at the following minimal density:

| <u>Monitored Unit</u> | <u>Density</u> |
|---|--------------------------------------|
| Ore Zone Monitors | All |
| Ore Zone Baseline (restoration) | 1 well per 4 acres of pattern area |
| Shallow Zone Monitors | 1 well per 3.5 acres of pattern area |
| Deep Zone Monitors (where zone present) | 1 well per 3.5 acres of pattern area |

Wells utilized to establish baseline ground water quality for past Irigaray production areas were as follows:

| <u>Monitored Unit</u> | <u>Wells per Monitored Unit</u> |
|---|---------------------------------|
| Irigaray Unit 1 Sandstone | 2 |
| Irigaray deep monitor zone | 2 |
| Irigaray perimeter and trend monitor wells (Units 1-9) | 70 percent of installed wells |

Baseline ground water quality in previously approved production areas shall be the mean data values (well field average) from the following submittals:

| | |
|---|--|
| Irigaray Units 1-5 | April 16, 1990 (refers to WDEQ permit 478) |
| Unit 6 | April 4, 1988 |
| Unit 7 | November 2, 1987 (Table 4) |
| Units 8-9 | January 28, 1988 |
| <u>Christensen Ranch</u> Unit 3 and Module 2 expansion | December 1, 1988 (Table 2) |
| Unit 3 expansion and Module 4A expansion | August 8, 1991 (Table 6) |
| Unit 2 south portion | November 27, 1992 (Table 2) |
| Unit 2 north portion | April 16, 1992 (Table 2) |
| Unit 4 | April 1, 1994 (Table 6) |
| Unit 5 | February 28, 1995 (Table 7) |

[Applicable Amendment: 4]

- 10.4 Prior to mining in each production unit, the licensee shall collect ground water samples and establish Upper Control Limits (UCLs) in accordance with Section 5.8 of the approved license application. UCLs for monitor wells established prior to the issuance of the Performance Based License Condition (PBLC) in December 1996, are provided in Table 5.26 for the Irigaray site and Table 5.27 for the Christensen Ranch site in Section 5.8 of the approved license application. UCLs shall be applied to all monitor wells in conformance with the approved license application and appropriate SOPs. The UCL parameters shall be chloride, conductivity, and total alkalinity.

[Applicable Amendment: 4]

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- 10.5 The licensee is authorized to conduct operations at a maximum flow rate of 4000 gallons per minute, exclusive of restoration flow. Annual dried yellowcake production shall not exceed 2.5 million pounds.

[Applicable Amendments: 5, 13]

- 10.6 Solution evaporation ponds A, B, C, D and E, shall have at least 2 feet of freeboard. Ponds RA and RB shall have at least 8 feet of freeboard. The 8-foot freeboard may be temporarily changed to a 2-foot freeboard in either RA or RB as long as sufficient reserve capacity is available in the overall pond system to accept the contents of one of the ponds in case of leakage. The Christensen Ranch permeate storage pond, brine ponds and filter backwash pond (if constructed) shall have at least 2 feet of freeboard.

Additionally, the licensee shall, at all times, maintain sufficient reserve capacity in the evaporation pond system to enable the transfer of the contents of a pond to other ponds. In the event of a leak and subsequent transfer of liquid, the freeboard requirements shall be suspended during the repair period.

[Applicable Amendments: 4, 13]

- 10.7 All liquid effluents from process buildings and other process waste streams, with the exception of sanitary wastes, shall be returned to the process circuit, discharged to the solution evaporation ponds, or disposed of as allowed by NRC regulations.

Additionally, the licensee is authorized to dispose of process solutions, injection bleed, and restoration brine in the following wells:

COGEMA DW No. 1
Christensen 18-3
DW-1
DW-2

The licensee shall maintain a record of the volumes of solution disposed in these wells and submit this information in the annual monitoring report.

[Applicable Amendment: 4]

- 10.8 The licensee shall maintain effluent control systems, as specified in Section 4.0 of the approved license application, with the following additions:

- A. Operations shall be suspended within 1 hour in the dry/pack area of the plant if any of the emission control equipment for the yellowcake drying or packaging areas is not operating within the ranges permitted by WDEQ Air Quality Permit No. OP-254.
- B. The licensee shall, during all periods of yellowcake drying operations, assure that the scrubber is operating within the recommended ranges for water flow and air pressure differential. This shall be accomplished by use of continuous monitoring equipment which will record the scrubber flow rate and differential pressure, and signal an audible alarm if they fall below the recommended ranges in the permit. Manual readings and alarm checks will be documented once per 12-hour shift.

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- C. The furnace draft pressure shall be read and documented once per 12-hour shift, and maintained within the design specification of -0.1 to -0.5 inches of water.

[Applicable Amendment: 4]

- 10.9 The licensee shall use a Radiation Work Permit (RWP) for all work or non-routine maintenance jobs where the potential for significant exposure to radioactive material exists and for which no standard written operating procedure exists. All RWPs shall be accompanied by a breathing zone air sample or applicable area air sample. The RWP shall be issued by the RSO or designee, qualified by way of specialized radiation protection training, and RWPs shall include, as a minimum, the information described in Section 2.2 of Regulatory Guide 8.31.

- 10.10 The licensee shall sample particulates and radon progeny on a monthly frequency at the Irigaray and Christensen Ranch Satellite locations shown on Figures 5.2 and 5.3 of the approved license application. Additional sampling locations can be added by the licensee through the SERP.

[Applicable Amendment: 4]

- 10.11 If employees do not shower prior to leaving the restricted area, they shall monitor themselves with an alpha survey instrument prior to exiting in conformance with Regulatory Guide 8.30.

- 10.12 The licensee shall implement the bioassay program discussed in Regulatory Guide 8.22. Exceedance of the administrative or actions levels and corrective actions performed will be documented in the ALARA Audit Report.

[Applicable Amendment: 4]

- 10.13 All radiation monitoring, sampling, and detection equipment shall be recalibrated after each repair and as recommended by the manufacturer, or at least annually, whichever is more frequent. In addition, all radiation survey instruments shall be operationally checked with a radiation source each day when in use.

- 10.14 DELETED BY Amendment 4.

- 10.15 The licensee shall incorporate the restoration data for the 517 and USMT sites into the Irigaray completion report.

[Applicable Amendment: 4]

- 10.16 The licensee shall conduct ground water restoration and post-restoration monitoring as described in Section 6.1 of the approved license application. The primary goal of restoration shall be to return the ground water quality, on a production-unit average, to baseline concentrations on a parameter-by-parameter basis. If the primary goal cannot be achieved, the ground water will, at a minimum, be returned to an alternate standard approved by the NRC.

Changes to ground water restoration or post-restoration monitoring plans shall be submitted to the NRC for review and approval at least 2 months prior to ground water restoration in a mining unit.

[Applicable Amendment: 13]

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- 10.17 The licensee shall include the following as part of the ground water monitoring program:
Annual sampling and analysis for chloride and conductivity from 5I7 and USMT Wells M-1, NM-3, M-4, SM-1, M-219, M-220, and M-221.
- 10.18 The licensee shall implement the respiratory protection program, as described in the approved license application.
- 10.19 The licensee is hereby authorized to receive contaminated process equipment for reuse from licensed uranium recovery operators. Records of all receipts shall be maintained.
- [Applicable Amendments: 4, 13]
- 10.20 The licensee is hereby authorized to transfer source material to any facility licensed by NRC or an NRC Agreement State to receive source material for purposes of drying and storage. The licensee shall follow Standard Operation Procedure No. E-11 in the event of a transportation or storage accident.
- [Applicable Amendments: 4, 13]
- 10.21 Prior to initiating vanadium separation processing, the licensee's Safety and Environmental Review Panel (SERP), in accordance with License Condition 9.4 shall assess the potential safety and environmental impacts of that process. If those impacts are outside the scope of the impacts considered by NRC in the EA as part of the license renewal review, the licensee shall submit a license amendment request to NRC for review and approval.
- [Applicable Amendments: 4, 13]
- 10.22 The licensee shall use its SOP PBLC-02, approved by NRC in December 1996, including the guidance for evaluating hydrologic connectivity between aquifers, in assessing the potential start up of new mine units.
- [Applicable Amendments: 4, 13]

SECTION 11: Monitoring, Recording, and Bookkeeping Requirements

- 11.1 Injection manifold pressures and flow rates shall be measured and recorded daily. During well-field operations, injection pressures shall not exceed 120 psi at the Irigaray site, and 140 psi at the Christensen Ranch site. Also, during maintenance tasks, injection pressures shall not exceed the integrity test pressures.
- 11.2 All designated monitor wells shall be sampled and tested for the UCLs established in accordance with Condition 10.4. Sampling shall be performed on the routine sampling schedule in the approved license application.

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If the routine sampling results indicate an exceedance of at least two UCLs, a second sample shall be collected from that well within 48 hours and analyzed for chloride, conductivity, and total alkalinity. The well shall be placed on excursion status if the results from the second sample also exceed at least two of the established UCLs.

If the results from the second sample do not confirm the initial exceedance, a third sample shall be collected within 48 hours of receiving the results from the second sampling, and analyzed. The routine sampling shall be considered in error if the second and third samples do not confirm the initial exceedance. The well shall be placed on excursion status if the results from the second or third samples exceed at least two of the established UCLs.

Upon confirming an excursion, the licensee shall implement corrective actions, and increase the sampling frequency for the excursion indicators to weekly. Written progress reports of the excursion status shall be submitted to the NRC, in accordance with Condition 9.2, on a quarterly basis, until the excursion has been mitigated. An excursion is considered mitigated when the concentrations of at least two excursion indicators remain below the established UCLs for three consecutive samples.

[Applicable Amendments: 4, 8, 13]

- 11.3 The licensee shall conduct effluent, personnel, and environmental monitoring programs in accordance with Sections 5.7 and 5.8 of the approved license application.

[Applicable Amendments: 6, 13]

- 11.4 The licensee shall perform and document weekly visual inspections of the Irigaray and Christensen Ranch Satellite evaporation pond embankments, fences and liners, as well as measurements of pond freeboard and checks of the leak detection system. Any time 6 vertical inches or more of fluid is detected in the leak detection system standpipes, it shall be analyzed for chloride, conductivity, pH and uranium. If analyses indicate that the pond is leaking, the licensee shall lower the pond fluid level by transferring its contents to an alternate cell, and undertake repairs, as needed. If standpipe water exists, quality samples shall be analyzed for the above parameters weekly during the leak period and for at least 2 weeks following repairs.

[Applicable Amendment: 4]

- 11.5 The licensee shall conduct the weekly in-plant inspection and audit programs described in Section 5.3 of the approved license application. In addition, the RSO or designee shall document a daily walk-through of the Irigaray and Christensen Ranch Satellite facilities to determine that radiation control practices are being implemented appropriately.

[Applicable Amendments: 4, 13]

- 11.6 The results of the following activities, operations, or actions shall be documented: sampling, analyses, surveys and monitoring, survey/monitoring equipment calibration, results of reports on audits and inspections, all meetings and training courses required by this license; and any subsequent reviews, investigations and corrective actions. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained for a period of at least five (5) years.

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- 11.7 The licensee shall monitor for external exposure in accordance with 10 CFR 20.1502(a)(1), and Section 5.7.2 of the approved license application. The licensee shall monitor for internal exposure in accordance with 10 CFR 20.1502(b)(1) and Section 5.7.3 of the approved license application.

[Applicable Amendment: 13]

SECTION 12. Reporting Requirements

- 12.1 Effluent and environmental monitoring program results provided in the annual report and in accordance with 10 CFR 40.65 "Effluent monitoring reporting requirements," shall be reported in the format shown in Table 3 of Regulatory Guide 4.14, (Rev. 1) entitled, "Sample Format for Reporting Monitoring Data." The report shall also include injection rates, recovery rates and injection manifold pressures.

[Applicable Amendments: 4, 13]

- 12.2 Spill, Leak, Excursion, and Incident/Event Reporting

Until license termination, the licensee shall maintain documentation of unplanned releases of source or 11e.(2) byproduct materials (including extraction solutions) and process chemicals. Documented information shall include, but not be limited to: date, volume, total activity of each radionuclide released, radiological survey results, soil sample results (if taken), corrective actions, results of post remediation surveys (if taken), and a map showing the spill/event location and the impacted area.

The licensee shall have procedures which will evaluate the consequences of the spill or incident/event against 10 CFR 20, Subpart "M," and 10 CFR 40.60 reporting criteria. If the criteria are met, the licensee must report this information to the NRC Operations Center as required.

If the licensee is required to report any spills, leaks, or excursions of source, 11e.(2) byproduct material, or process chemicals because of impact on the environment, or to report any other incidents/events to State or Federal agencies, a report shall be made to the Region IV Branch Chief for Uranium Recovery Inspection and the NRC Project Manager, by telephone or electronic mail, within 48 hours. This notification shall be followed, within 30 days of the notification, by submittal of a written report, according to Condition 9.2, detailing the conditions leading to the release or incident/event, corrective actions taken, and results achieved.

[Applicable Amendment: 4]

- 12.3 DELETED BY Amendment No. 4.

- 12.4 DELETED BY Amendment No. 4.

- 12.5 DELETED BY Amendment No. 4.

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- 12.6 An annual report will be submitted to the NRC in accordance with License Condition 9.2, that includes the ALARA audit report, land use survey, monitoring data, and the SERP information required under License Condition 9.4(d). The report shall include a summary of the daily walk-through inspections.

[Applicable Amendments: 4, 13]

- 12.7 DELETED BY Amendment No. 4.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Date: 1/24/2012

Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

