NRC FORM 374

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, 51, 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 Americas, Inc.	3. License Number SUA-1596, Amendment No. 2
2. 907 North Poplar Street, Suite 260 Casper, WY 82601	4. Expiration Date September 28, 2020 5. Docket No. 40-9073 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
a. Natural Uranium b. Byproduct material as defined in 10 CFR 40.4	Any Unspecified	a. Unlimited b. Quantity generated under operations authorized by this license

SECTION 9: Administrative Conditions

9.1 The authorized place of use shall be the licensee's Moore Ranch Uranium Project in Campbell County, Wyoming. The licensee shall conduct operations within the license area boundaries shown in Figure 2.1-2 of the approved license application.

9.2 The licensee shall conduct operations in accordance with the commitments, representations, and statements contained in the license application dated October 2007 (ADAMS Accession No. ML072851218, as updated), which are hereby incorporated by reference, except where superseded by specific conditions in this license.

Whenever the word "will" or "shall" is used in the above referenced documents, it shall denote a requirement.

9.3 All written notices and reports sent to the Nuclear Regulatory Commission (NRC) as required under this license and by regulation shall be addressed as follows: ATTN: Document Control Desk, Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. An additional copy shall be submitted to: 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, U.S. Nuclear Regulatory Commission, Mail Stop T-8F5, 11545 Rockville Pike, Two White Flint North, Rockville, MD 20852-2738. Incidents and events that require telephone notification shall be made to the NRC Operations Center at (301) 816-5100 (collect calls accepted).

License Number SUA-1596

MATERIALS LICENSE
SUPPLEMENTARY SHEET

Docket or Reference Number
40-9073

Amendment No. 2

9.4 Change, Test and Experiment License Condition

A) The licensee may, without obtaining a license amendment pursuant to 10 CFR 40.44, and subject to conditions specified in (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 test or experiments not described in the license application (as updated).

B) The licensee shall obtain a license amendment pursuant to 10 CFR 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 facility structure, equipment, or monitoring system (SEMS) 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 SEMS 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 SEMS with a different result than previously evaluated in the license application (as updated);

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 For purposes of this paragraph as applied to this license, SEMS means any SEMS which has been referenced in a staff SER, TER, EA, or environmental impact statement (EIS) and supplements and amendments thereof.

C) Additionally, the licensee must obtain a license amendment unless the change, test, or experiment is consistent with NRC's previous 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 SER, TER, and EIS or EA. This would include all supplements and amendments, and TERs, EAs, EISs issued with amendments to this license.

D) The licensee's determinations concerning (B) and (C) 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 or 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.

E) 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 (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.

9.5 Financial Assurance. 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, which includes 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.

Proposed annual updates to the financial assurance amount, consistent with Criterion 9 of Appendix A to 10 CFR Part 40, shall be provided to the NRC 90 days prior to the anniversary date (e.g., renewal date of the financial assurance instrument/vehicle). The financial assurance update renewal date for Moore Ranch will be determined following consultation with Uranium One and the State of Wyoming. If the NRC has not approved a proposed revision 30 days prior to the expiration date of the existing financial assurance arrangement, the licensee shall extend the existing arrangement, prior to expiration, for one year. Along with each proposed revision or annual update of the financial assurance estimate, 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 the estimated costs for site closure.

Within 90 days of NRC approval of a revised closure (decommissioning) plan and its cost estimate, the licensee shall submit, for NRC review and approval, a proposed revision to the financial assurance arrangement if estimated costs exceed the amount covered in the existing arrangement. The revised financial assurance instrument shall then be in effect within 30 days of written NRC approval of the documents.

At least 90 days prior to beginning construction associated with any planned expansion or operational change that was not included in the annual financial assurance update, the licensee shall provide, for NRC approval, an updated estimate to cover the expansion or change. The licensee shall also provide the NRC with copies of financial assurance-related correspondence submitted to the State of Wyoming, a copy of the State's financial assurance review, and the final approved financial assurance arrangement. The licensee

also must ensure that the financial assurance instrument, where authorized to be held by the State, identifies the NRC-related portion of the instrument and covers the aboveground decommissioning and decontamination, the cost of offsite disposal of solid byproduct material, 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. Reclamation or decommissioning plan cost estimates and annual updates should follow the outline in Appendix C to NUREG-1569 (NRC, 2003), entitled "Recommended Outline for Site-Specific In Situ Leach Facility Reclamation and Stabilization Cost Estimates."

The licensee shall continuously maintain an approved surety instrument for the Moore Ranch project, in favor of the State of Wyoming. The initial surety estimate shall be submitted for NRC review and approval within 90 days of license issuance, and the surety instrument shall be submitted for NRC review and approval 90 days prior to commencing operations.

9.6 Release of surficially contaminated equipment, materials, or packages from restricted areas 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 April 1993, or suitable alternative procedures approved by NRC prior to any such release.

Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides shall apply independently.

9.7 The licensee shall follow the guidance set forth in U.S. Nuclear Regulatory Commission, Regulatory Guides (as revised) 8.22, "Bioassay at Uranium Recovery Facilities," and 8.30, "Health Physics Surveys in Uranium Recovery Facilities," or NRC-approved equivalent.

The licensee shall follow the guidance set forth in Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposure at Uranium Recovery Facilities will be As Low As Is Reasonably Achievable (ALARA)," with the following exception:

A. The licensee will identify a qualified designee(s) to perform daily inspections in the absence of the RSO or HPT. The qualified designee(s) will have health physics training, and such training program will be specified by the licensee. Furthermore, the qualified designee(s) may perform daily inspections no more than two days per week, and those reports will be reviewed by health physics staff within 48 hours of completing the report. The licensee will also have a health physics staff member available by telephone while the qualified designee(s) is performing the daily inspections.

Additional exceptions are subject to review and approval by the NRC.

9.8 Cultural Resources. Before engaging in any developmental activity not previously assessed by the NRC, the licensee shall administer a cultural resource inventory if such survey has not been previously conducted and submitted to the NRC. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act (as amended) and its implementing regulations (36 CFR 800), and the Archaeological Resources Protection Act (as amended) and its implementing regulations (43 CFR 7).

In order 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 of the area shall occur until the licensee has received authorization from the NRC to proceed.

9.9 The licensee shall dispose of solid byproduct material from the Moore Ranch operations at a site that is authorized by the NRC or an NRC Agreement State to receive byproduct material. The licensee's approved solid byproduct material disposal agreement must be maintained on site. In the event that the agreement expires or is terminated, the licensee shall notify the NRC within seven working 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.

9.10 The results of the following activities, operations, or actions shall be documented: sampling; analyses; surveys or monitoring; survey/ monitoring equipment calibrations; reports on audits and inspections; all meetings and training courses; and any subsequent reviews, investigations, or corrective actions required by NRC regulation or this license. Unless otherwise specified in a license condition or applicable NRC regulation, all documentation required by this license shall be maintained until license termination, and is subject to NRC review and inspection.

9.11 The licensee is hereby exempted from the requirements of 10 CFR 20.1902(e) for areas within the facility, provided that all entrances to the facility are conspicuously posted with the words, "CAUTION: ANY AREA WITHIN THIS FACILITY MAY CONTAIN RADIOACTIVE MATERIAL."

9.12 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: 2]

SECTION 10: Operations, Controls, Limits, and Restrictions

Standard Conditions

10.1 The licensee shall use a lixiviant composed of native ground water, sodium carbonate, carbon dioxide gas and/or sodium bicarbonate, and dissolved oxygen, as specified in the approved license application.

10.2 Facility Throughput. The plant throughput shall not exceed a maximum flow rate of 3,000 gallons per minute, excluding restoration flow. Annual dried yellowcake production shall not exceed 3 million pounds.

10.3 Emission controls (dryer). The licensee shall maintain effluent control systems as specified in Section 4.1 of the approved license application.

10.4 Equipment Calibration. 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 and documented with a radiation source each day when in use.

10.5 The licensee shall implement and maintain a training program for all site employees, as described in Regulatory Guide 8.31, and as detailed in the approved license application. All training materials shall incorporate the information from current versions of 10 CFR Part 19 and 10 CFR Part 20. Additionally, classroom training shall include the subjects described in Section 2.5 of Regulatory Guide 8.31. All personnel shall attend annual refresher training, and the licensee shall conduct regular safety meetings at least every two months, as described in Section 2.5 of Regulatory Guide 8.31.

10.6 The licensee shall develop and implement written standard operating procedures (SOPs) for: (1) all operational activities involving radioactive and non-radioactive materials associated with licensed activities that are handled, processed, stored, or transported by employees; (2) all non-operational activities involving radioactive materials including in-plant radiation protection and environmental monitoring; and (3) emergency procedures for potential accident/unusual occurrences including significant equipment or facility damage, pipe breaks and spills, loss or theft of yellowcake or sealed sources, significant fires, and other natural disasters. The SOPs shall include appropriate radiation safety practices to be followed in accordance with 10 CFR Part 20. SOPs for operational activities shall enumerate pertinent radiation safety practices to be followed. A copy of the current written procedures shall be kept in the area(s) of the production facility where they are utilized.

10.7 Mechanical Integrity Tests. The licensee shall construct all wells in accordance with methods described in Section 3.1.2.4 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 3.1.2.4 of the approved license application. Any failed well casing that cannot be repaired to pass the integrity test shall be appropriately plugged and abandoned in accordance with Section 6.1.8 of the approved license application.

Facility Specific Conditions

10.8 Well Field Packages. For Well Field 1, the licensee shall submit a hydrologic test data package to the NRC. For Well Field 2, the licensee shall submit a hydrologic test data package to the NRC for review and approval. For both Well Field 1 and Well Field 2, the hydrologic test packages shall be submitted at least 60 days prior to the planned start date of lixiviant injection.

10.9 Ground Water Restoration. The licensee shall conduct ground water restoration activities in accordance with the approved license application. Permanent cessation of lixiviant injection in a well field would signify the licensee's intent to shift from the principal activity of uranium production to the initiation of ground water restoration. Prior to initiation of ground water restoration activities, the licensee shall determine the restoration schedule. If the licensee determines that these activities are expected to exceed 24 months, then the licensee shall submit an alternate schedule request that meets the requirements of 10 CFR 40.42.

Hazardous constituents in the ground water shall be restored to the numerical ground water protection standards as required by 10 CFR 40, Appendix A, Criterion 5(B)(5). In submitting any license amendment application requesting review of proposed alternate concentration limits (ACLs) pursuant to Criterion 5(B)(6), the licensee must also show that it has first made reasonable effort to restore the specified hazardous constituents to the background or maximum contaminant levels (whichever is greater).

Changes to ground water restoration or post-restoration monitoring plans shall be submitted to the NRC for review and approval at least 60 days prior to ground water restoration in a well field.

10.10 The licensee shall maintain an inward hydraulic gradient in each individual well field, starting when lixiviant is first injected into the production zone and continuing until the restoration target values (RTVs) have been reached.

10.11 All liquid effluents from process buildings and other process waste streams, with the exception of sanitary wastes, shall be returned to the process circuit or disposed of as allowed by NRC regulations. Additionally, the licensee is authorized to dispose of process solutions, injection bleed, and restoration brine using deep well injection, as permitted by WDEQ and described in the approved license application.

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

10.12 At least 12 months prior to initiation of any planned final site decommissioning, the licensee shall submit a detailed decommissioning plan for NRC review and approval. The plan shall represent as-built conditions at the Moore Ranch facility.

SECTION 11: Monitoring, Recording, and Bookkeeping Requirements

Standard Conditions

11.1 In addition to the reports required by Title 10 of the Code of Federal Regulations, the licensee shall submit the following reports related to operations at the facility:

A. A quarterly report that includes the weekly excursion indicator parameter values, corrective actions taken, and the results obtained.

B. A semi-annual report that discusses: status of well fields in operation (including last date of lixiviant injection), status of well fields in restoration, status of any long term excursions.

C. Flow rates on each injection and production well and injection manifold pressures on the entire system shall be measured and recorded daily. These measurements shall be made available for inspection upon request.

11.2 The licensee shall submit the results of the annual review of the radiation protection program content and implementation performed in accordance with 10 CFR 20.1101(c). These results shall include an analysis of dose to individual members of the public consistent with 10 CFR 20.1301 and 10 CFR 20.1302.

11.3 Background Monitoring. Prior to injection of lixiviant in a well field, the licensee shall establish background pre-operational ground water quality data for the overlying and underlying aquifers and restoration target values (RTVs) for the ore zone aquifers for all well fields. Background water quality sampling shall provide representative pre-operational ground water quality data and restoration criteria as described in the approved license application.

The data for each well field shall consist, at a minimum, of the following sampling and analyses:

A. Ore Zone. Samples shall be collected from production and injection wells at a minimum density of one production or injection well per 3 acres in the 70 sand. Samples shall also be collected from all perimeter monitor wells in the 70 sand.

B. Overlying and Underlying Aquifers. Samples shall be collected from all monitoring wells in the 72 sand, 68 sand, and 60 sand (in areas where the 68 and 70 sand coalesce in Well Field 2) at a minimum density of one well per 4 acres.

C. Four samples shall be collected from each well. Consecutive sampling events shall be at least 14 days apart.

D. The samples shall be analyzed for ammonia, nitrate, bicarbonate, boron, carbonate, fluoride, sulfate, total dissolved solids, dissolved arsenic, dissolved cadmium, dissolved calcium, dissolved chloride, dissolved chromium, total and dissolved iron, dissolved magnesium, total manganese, dissolved molybdenum, dissolved potassium, dissolved selenium, dissolved sodium, dissolved zinc, radium-226, radium-228, gross alpha, gross beta, uranium, and vanadium.

E. Ground water RTVs for the ore zone aquifer shall be established on a parameter-by-parameter basis on either a well field average or well-specific basis for all constituents.

11.4 Establishment of UCLs. Prior to injection of lixiviant into a well field, the licensee shall establish upper control limits (UCLs) in designated overlying and underlying aquifer and perimeter monitoring wells. The UCLs for the following indicator parameters: chloride, conductivity, and total alkalinity shall be established by analyzing background monitoring data collected to satisfy LC 11.3. The concentrations of these UCLs shall be established for each well field by calculating the background mean concentration and adding five standard deviations. The UCL for chloride can be set at the background mean concentration and adding either five standard deviations or 15 mg/l, whichever is higher.

11.5 Excursion Monitoring. Monitoring for excursions shall occur twice monthly and at least 10 days apart. An excursion shall have occurred if, in any monitor well any two UCL parameters exceed their respective UCLs. A verification sample shall be taken within 48 hours after results of the first analyses are received. If the second sample shows that the excursion criterion is exceeded, an excursion shall be confirmed. If the second sample does not show that the excursion criterion is exceeded, a third sample shall be taken within 48 hours after the second set of sampling data was acquired. If the third sample shows that the excursion criterion is exceeded, an excursion shall be confirmed. If the third sample does not show that the excursion criterion is exceeded, the first sample shall be considered to be an error and the well is removed from excursion status.

Upon confirmation of an excursion, the licensee shall notify NRC, as discussed below, implement corrective action, and increase the sampling frequency for the indicator parameters at the excursion well to once every seven days. Corrective actions for confirmed excursions may be, but are not limited to, those described in Section 5.7.8.2 of the approved license application. An excursion is considered corrected when the concentrations of the indicator parameters are below the concentration levels defining an excursion for three consecutive weekly samples.

If an excursion is not corrected within 60 days of confirmation, the licensee shall either: (a) terminate injection of lixiviant within the well field until aquifer cleanup is complete; or (b) increase the surety in an amount to cover the full third-party cost of correcting and cleaning up the excursion. The surety increase shall remain in force until the NRC has verified that the excursion has been corrected and cleaned up. The written 60-day excursion report shall identify which course of action the licensee is taking. Under no circumstances does this condition eliminate the requirement that the licensee must remediate the excursion to meet ground water protection standards as required by LC 10.9 for all constituents established per LC 11.3.

The licensee shall notify the NRC Project Manager (PM) by telephone within 24 hrs of confirming a lixiviant excursion, and by letter within 7 days from the time the excursion is confirmed, pursuant to LC 11.6. A written report describing the excursion event, corrective actions taken, and the corrective action results shall be submitted to the NRC within 60 days of the excursion confirmation. For all wells that remain on excursion after 60 days, the licensee shall submit a report as discussed in LC 11.1(A).

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

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, then report to the NRC Operations Center as required.

If the licensee is required to report any well field excursions and spills of source, byproduct material, and process chemicals that may have an impact on the environment, or any other incidents/events, to any State or other Federal agency, a report shall be made to the NRC Headquarters Project Manager by telephone or electronic mail (e-mail) within 24 hours. This

notification shall be followed, within 30 days of the notification, by submittal of a written report to NRC Headquarters, as per LC 9.3, detailing the conditions leading to the spill or incident/event, corrective actions taken, and results achieved.

Facility Specific Conditions

11.7 The licensee shall conduct airborne sampling for natural U, Th-230, Ra-226, Po-210, and Pb-210 at each in-plant air particulate sampling location at a frequency of once every 6 months for the first two years and annually thereafter to ensure compliance with 10 CFR 20.1204(g). The licensee shall also evaluate changes to plant operations to determine if more frequent isotopic analyses are required for compliance with 10 CFR 20.1204(g).

11.8 The licensee shall observe and document gas breakout events in individual production wells during monitoring, sampling, inspection, or routine work over of equipment in well fields and header houses. The licensee shall also document changes in well operation or well field piping, pumps, and gauges caused by free gas phase in well field fluids.

SECTION 12.0: Preoperational Conditions

Standard Conditions

12.1 Prior to commencement of operations in any well field, the licensee shall obtain all necessary permits and licenses from the appropriate regulatory authorities. The licensee shall also submit a copy of all permits for its Class I and Class III underground injection wells.

12.2 Prior to commencement of operations, the licensee shall coordinate critical emergency response requirements with local authorities, fire department, medical facilities, and other emergency services. The licensee shall document these coordination activities and maintain such documentation on-site.

12.3 The licensee shall not commence operations until the NRC performs a preoperational inspection to confirm, in part, that operating procedures and approved radiation safety and environmental monitoring programs are in place, and that preoperational testing is complete.

The licensee should, at least 90 days prior to the expected commencement of operations, inform the NRC to allow for sufficient time to plan and perform the preoperational inspection.

12.4 The licensee shall identify the location, screen depth, and estimated pumping rate of any new ground water wells or new use of an existing well within the license area since the application was submitted to the NRC. The licensee shall evaluate the impact of ISR operations to potential ground water users and recommend any additional monitoring or other measures to protect ground water users. The evaluation shall be submitted to the NRC for review and approval prior to commencement of operations.

12.5 Prior to commencement of operations, the licensee shall submit the qualifications of radiation safety staff members for NRC review.

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Facility Specific Conditions

Prior to the commencement of operations, the license shall be amended to address the following items in LC 12.6 to LC 12.15.

12.6 The licensee shall install a meteorological station within the license area and collect meteorological data for a period of one year, or until the data collected is determined to be representative of long term conditions, at a data recovery rate of 90 percent. The data collected shall include, at a minimum, temperature, precipitation, wind speed, wind direction, and an annual wind rose. The submittal shall include a summary of the stability classification.

12.7 The licensee shall submit a preoperational radiological environmental monitoring program report for NRC approval that will include environmental results for groundwater, air particulate, and livestock (grazing sheep), as described in Regulatory Guide 4.14.

12.8 The licensee shall submit to the NRC the procedures by which it will ensure that unmonitored employees will not exceed 10 percent of the dose limit.

12.9 The licensee shall provide the following information for the airborne effluent and environmental monitoring program in which it shall:

A. Discuss how, in accordance with 10 CFR 40.65, the quantity of the principal radionuclides from all point and diffuse sources will be accounted for, and verified by, surveys and/or monitoring.

B. Evaluate the member(s) of the public likely to receive the highest exposures from licensed operations consistent with 10 CFR 20.1302.

C. Discuss and identify how radon (radon-222) progeny will be factored into analyzing potential public dose from operations consistent with 10 CFR Part 20, Appendix B, Table 2.

D. Discuss how, in accordance with 10 CFR 20.1501, the occupational dose (gaseous and particulate) received throughout the entire License Area from licensed operations will be accounted for, and verified by, surveys and/or monitoring.

12.10 The licensee shall submit an updated organizational chart identifying the QA manager position.

12.11 The licensee shall submit a copy of the solid byproduct material disposal agreement to the NRC.

12.12 Consistent with Regulatory Guide 4.14, the licensee shall establish air particulate sampling stations in the three sectors with the highest predicted concentration and colocate radon air samplers and direct radiation and soil sampling with the air particulate sampling stations.

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12.13 Consistent with Regulatory Guide 4.14, the licensee shall establish an air particulate sampling location at the nearest residence or occupiable structure. In conjunction with the air particulate sampling location, the licensee shall colocate passive radon monitors with the air particulate sampling location. The air particulate sampling location and other colocated sampling media must be operational prior to commencement of operations. The licensee must notify the NRC, in writing, upon establishing an operational air particulate sampling location and include the sector and distance from the CPP.

12.14 The licensee shall develop a survey program for beta/gamma contamination for personnel contamination from restricted areas, and beta/gamma contamination in unrestricted and restricted areas that will meet the requirements of 10 CFR Part 20, Subpart F.

FOR THE NUCLEAR REGULATORY COMMISSION

Dated: 11/23/2010

/RA/

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