



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

January 10, 2019

Bill Halliburton, Administrator
Cimarron Environmental Response Trust
c/o Environmental Properties Management, LLC
9400 Ward Parkway
St. Louis, MO 64114

SUBJECT: CIMARRON URANIUM PLANT NRC INSPECTION
REPORT 070-00925/2018-002

Dear Mr. Halliburton:

This letter refers to the routine, announced U.S. Nuclear Regulatory Commission (NRC) team inspection conducted onsite from November 27-28, 2018, at the Cimarron Uranium Plant located near Crescent, Oklahoma. This inspection examined activities conducted under your license as they relate to public health and safety, the common defense and security, and to confirm compliance with the Commission's rules and regulations and the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities and facilities, conduct of independent radiation measurements, and interviews with personnel. The inspection findings were discussed with Mr. Jeff Lux, Project Manager, and members of Enercon, a contractor for the licensee, at the conclusion of the onsite inspection on November 28, 2018. No violations of more than minor safety significance were identified, and no response to this letter is required.

In accordance with Title 10 of the *Code of Federal Regulations* Part 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the Public without redaction.

Should you have any questions concerning this matter, please contact Ms. Marti Poston, Health Physicist, at (817) 200-1181 or the undersigned at (817) 200-1151.

Sincerely,

/RA/

Janine F. Katanic, PhD, CHP, Chief
Fuel Cycle and Decommissioning Branch
Division of Nuclear Materials Safety

Docket No.: 070-00925
License No.: SNM-928

Enclosure:
NRC Inspection Report 070-00925/2018-002

cc w/enclosure:
M. Broderick
J. Lux

**U.S. NUCLEAR REGULATORY COMMISSION
REGION IV**

Docket No.: 070-00925

License No.: SNM-928

Report No.: 070-00925/2018-002

Enterprise Identifier: I-2018-002-0097

Licensee: Cimarron Environmental Response Trust

Location Inspected: Cimarron Uranium Plant
Crescent, OK

Inspection Dates: November 27-28, 2018

Lead Inspector: Martha R. Poston, Health Physicist
Fuel Cycle and Decommissioning Branch
Division of Nuclear Materials Safety

Inspectors: Robert J. Evans, PhD, CHP, PE, Senior Health Physicist
Fuel Cycle and Decommissioning Branch
Division of Nuclear Materials Safety

Christopher D. Steely, Health Physicist
Fuel Cycle and Decommissioning Branch
Division of Nuclear Materials Safety

Accompanied by: Janine F. Katanic, PhD, CHP, Chief
Fuel Cycle and Decommissioning Branch
Division of Nuclear Materials Safety

Jordan Caldwell, Environmental Program Specialist
Oklahoma Department of Environmental Quality
Waste Management Division
Radiation Management Section

Approved by: Janine F. Katanic, PhD, CHP, Chief
Fuel Cycle and Decommissioning Branch
Division of Nuclear Materials Safety

Attachment: Supplemental Inspection Information

Enclosure

EXECUTIVE SUMMARY

Cimarron Environmental Response Trust NRC Inspection Report 070-00925/2018-002

The U.S. Nuclear Regulatory Commission (NRC) performed a routine, announced team inspection from November 27-28, 2018, at the Cimarron facility which included observations of site activities, independent radiation surveys, review of records, and interviews with site personnel. In summary, the licensee was conducting decommissioning activities in accordance with regulatory and license requirements.

Management Organization and Controls and Decommissioning for Materials Licensees

The organizational structure and staffing levels maintained by the licensee during the inspection period met the requirements specified in the license and were sufficient for the work in progress. The licensee's written safety plan, standard operating procedures, and activity plans were appropriate for the activities in progress, commensurate with the risks associated with the program and in accordance with regulatory and license requirements. (Section 1.2)

Radiation Protection

The licensee implemented a radiation protection program that met the requirements of Title 10 *Code of Federal Regulations* (10 CFR) Part 20 and the license. The licensee's radiation protection program was commensurate with the risk involved based on licensee activities and included the required program elements. (Section 2.2)

Effluent Control and Environmental Protection

The licensee conducted environmental monitoring in accordance with license and procedural requirements. The licensee reported the results in annual reports to the NRC. (Section 3.2)

Closeout Inspection and Survey

The licensee's facility had been divided into 15 subareas, 12 of these subareas have been released by the NRC for unrestricted use. Subareas F, G and, N remain on the license pending groundwater remediation. A pilot test of the proposed groundwater remediation was conducted in 2017-2018. The pilot test resulted in changes to the proposed Decommissioning Plan. The inspectors reviewed a qualitative radiological survey that was conducted by the licensee in 2017. The results of the survey indicated that pilot test operations did not result in surface contamination in the areas where the test was conducted. (Section 4.2)

Maintenance and Surveillance Testing

The licensee maintained its instrument calibration program in accordance with license requirements. (Section 5.2)

Low Level Radioactive Waste Storage

The licensee's storage and handling of low level radioactive waste met regulatory requirements and license conditions. (Section 6.2)

Emergency Preparedness

The licensee has standard operating procedures associated with emergency preparedness sufficient to meet the requirements of the application. Employees and visitors were provided emergency preparedness training as applicable. (Section 7.2)

Report Details

Site Status

The Cimarron Nuclear Fuel Production Facility was operated by Kerr-McGee from 1967 until 1975 when operations ceased. The site is approximately ½ mile north of the intersection of Oklahoma State Routes 74 and 33. Since closure, Kerr-McGee, and later Tronox, have been decommissioning the site in accordance with NRC Special Nuclear Material License SNM-928. Tronox filed for bankruptcy protection in January 2009, and upon emerging from bankruptcy in February 2011, the license was transferred to the Cimarron Environmental Response Trust. The trust is administered by Environmental Properties Management, LLC, a subsidiary of Burns & McDonnell. The goal of the Cimarron Environmental Response Trust is to remediate the property with the funds available to the point that the site can be released for unrestricted use.

The Cimarron site originally consisted of approximately 830 acres of land, with several buildings remaining from licensed operations. Approximately 117 acres west of Highway 74 was released by the NRC for unrestricted use and purchased by another corporation in 2015. The site now consists of approximately 500 acres (330 acres of rolling hills and 170 acres of floodplain) with the north property line being defined by the Cimarron River bank.

The original site was divided into 15 subareas, and 12 of the 15 subareas have been released by the NRC for unrestricted use. Subareas F, G, and N remain under the NRC license. Subareas G and N were releasable for unrestricted use, but the NRC determined that these two areas, along with subarea F, will remain under the NRC license until groundwater remediation has been completed. These three areas have groundwater concentrations that exceed the site-specific release criteria of 180 picocuries per liter (pCi/L) total uranium. The three areas are called Burial Area #1 (BA1), Western Alluvial Area, and Western Upland Area.

Since the previous NRC inspection in July 2016, NRC staff performed three site visits. The first site visit in September 2017 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML18060A410) included review and discussion of changes to the original Decommissioning Plan (DP) submitted by the licensee in December 2015. The licensee eliminated some groundwater treatment options, redesigned the treatment facility, and described a planned pilot test of the groundwater extraction process for the proposed groundwater remediation process. The planned pilot test consisted of the construction of injection and extraction trenches, with potable water being pushed into the groundwater spaces, allowing the groundwater to be extracted for treatment.

The second NRC site visit was conducted in November 2017 (ADAMS Accession No. ML18060A168) and was intended to be an observation of the pilot test, but the pilot test was delayed and a review of the radiation protection program was conducted instead. In December 2017, the licensee conducted a pilot test for the treatment of groundwater for BA1, Uranium Pond #2 (UP2), Uranium Pond #1 (UP1), and 1206 Drainage area. The licensee documented the results of the pilot test in a report dated June 19, 2018 (ADAMS Accession Nos. ML18171A300 and ML18171A316). The results of the pilot test resulted in additional changes to the DP.

The third NRC site visit was conducted in May 2018 (ADAMS Accession No. ML18156A478) to review the results of the pilot test and the resulting changes made to the DP. The revised DP was submitted to the NRC on November 2, 2018 (ADAMS Accession No. ML18323A195). At the end of the inspection period, the licensee's proposed DP was still under NRC review.

1 Management Organization and Controls (Inspection Procedure [IP] 88005) and Decommissioning for Materials Licensees (IP 87104)

1.1 Inspection Scope

Ensure the licensee has established an organization to administer the technical and safety policies, programs, and procedures necessary to satisfy the license and regulatory requirements and perform internal reviews, self-assessments and audits.

1.2 Observations and Findings

a. Organizational Structure

License Condition 26 references the licensee's Radiation Protection Plan (RPP). The organizational requirements are provided in Section 3 of the RPP. The inspectors compared the program in place at the time of the inspection to the organizational structure provided in Figure 3-1, Cimarron Environmental Response Trust Organization, provided in the RPP. The licensee had filled each of the required positions with qualified individuals. Contractors were used as needed to support onsite activities, including the recent pilot test. Sufficient staff were available to ensure compliance with licensed activities.

b. Activity Plans

The licensee conducted routine operations under standard operating procedures. Non-routine activities are covered under Activity Plans (AP). Section 9 of the RPP provides the requirements for APs. The inspectors reviewed the following APs for Calendar Year 2017 (CY2017) and CY2018:

AP-2017-001	1 st Quarter Groundwater Sampling and Analysis
AP-2017-002	2 nd Quarter Groundwater Sampling and Analysis
AP-2017-003	2017 Annual Environmental Monitoring
AP-2017-004	3 rd Quarter Groundwater Sampling and Analysis
AP-2017-005	Pilot Test Radiation Protection Support and Testing
AP-2018-001	1206 East Drainage Investigation
AP-2018-002	Broken Slurry Impact Evaluation

No issues or items of concern were identified as a result of the AP reviews.

c. Audits and Inspections

Title 10 *Code of Federal Regulations* (CFR) 20.1101(c) requires the licensee to periodically (at least annually) review the radiation protection program content and implementation. The licensee conducted an annual radiation safety audit. Details about the audit requirements are provided in Section 5.2 of the RPP. The inspectors reviewed

the annual audits for CY2016 and CY2017. The audits included evaluations of occupational exposures, radiation survey results, public dose, training, and compliance with license and regulatory requirements as applicable to the work being performed onsite during the respective years. The audits also identified an area of improvement regarding timely reviews of radiation protection program documentation by the radiation safety officer.

License Condition 27.e allows the license to make changes to the NRC-approved DP and RPP without NRC's approval, if these changes are consistent with the As Low As Reasonably Achievable (ALARA) principle and the decommissioning process. All changes shall be approved by the Cimarron ALARA Committee. License Condition 27.e(3), requires in part, that the licensee provide in an annual report to the NRC, a description of all changes, tests, and experiments made or conducted and a summary of the safety and environmental impact of each action. The licensee did not submit an annual report pursuant to License Condition 27.e(3) to the NRC for CY2017. When discussed with the licensee's staff, they indicated that they understood the annual report requirements under License Condition 27.e(3) were limited to changes pursuant to License Condition 27.e(3), and since they did not make any changes, they were not required to make a submission. The inspectors discussed this matter with the licensee and identified it as a violation of minor significance that is not subject to enforcement action in accordance with Section 2 of the Enforcement Policy. As a corrective action, on November 28, 2018, the licensee submitted to the NRC's Office of Nuclear Material Safety and Safeguards, a report for CY2017 indicating there were no changes pursuant to License Condition 27.e(3) (ADAMS Accession No. ML18333A324).

The licensee's ALARA committee met quarterly to discuss radiation safety issues. The inspectors reviewed the ALARA meeting minutes for all four quarters of 2017 and the first three quarters of 2018. As part of the 2017 ALARA audit, the ALARA committee decided to incorporate Revision 4 to the RPP into the most recent version of the DP and submit it electronically to the NRC. Accordingly, the licensee's implementation of Revision 3 of the RPP was reviewed during the inspection.

In addition to the RPP, the license implemented a Quality Assurance (QA) program in accordance with the requirements of NUREG/CR-5849, "Manual for Conducting Radiological Surveys in support of License Termination." Details about the QA program are provided in the Cimarron Site Quality Assurance Program Plan QAPP-001, Revision 3. The QAPP states that personnel performing quality activities will receive training in the QA program. The licensee provided QA program training to selected site workers in 2017-2018.

1.3 Conclusions

The organizational structure and staffing levels maintained by the licensee during the inspection period met the requirements specified in the license and were sufficient for the work in progress. The licensee's written safety plan, standard operating procedures, and activity plans were appropriate for the activities in progress, commensurate with the risks associated with the program and in accordance with regulatory and license requirements.

2 Radiation Protection (IP 83822)

2.1 Inspection Scope

Determine whether the licensee's radiation protection program was conducted in compliance with the license and 10 CFR Part 20 requirements. Specifically, verify the performance of the radiation protection program commensurate with the risk involved with licensee activities and the following program elements: (1) occupational exposures; (2) radiation work permits and respiratory protection; (3) radiological surveys; and (4) training.

2.2 Observations and Findings

License Condition 26 requires, in part, that the licensee shall conduct a radiation protection program in accordance with the RPP. At the time of the inspection, the licensee was implementing Revision 3 of the RPP.

License Condition 27.e allows the licensee to make changes to the RPP under certain conditions without NRC approval. The licensee revised the RPP in 2016. The inspectors reviewed the changes and concluded that no change required prior NRC approval. The changes were consistent with ALARA principles and the decommissioning process in place at the site.

The inspectors reviewed the licensee's occupational monitoring program. The licensee discontinued occupational monitoring in 2006, as allowed by 10 CFR 20.1502, but continued to conduct area monitoring to confirm the 2006 decision. The inspectors reviewed the licensee's 2017-2018 area monitoring records, which confirmed that no individual was likely to receive greater than 100 millirem per year, the public dose limit specified in 10 CFR 20.1301(a).

The licensee's contractor conducted air monitoring during the 2017-2018 pilot test. A total of 25 air samples were collected. The inspectors reviewed the sample results and found that they supported the licensee's conclusion that no individual should be assigned an internal dose based on the sample results.

The inspectors reviewed the licensee's routine survey and contamination control programs. The licensee conducted routine surveys in its office and in any restricted areas that were routinely occupied. There were no restricted areas at the time of the onsite inspection. The licensee also conducted monthly surveys, or upon entry if entries were greater than monthly, in the radioactive material areas. The records for 2017-2018 indicate that there were no contamination control problems. The licensee also maintained records of releases, including environmental samples, vehicles, and construction equipment. The records indicated that nothing was released with contamination above the action levels specified in Section 13 of the RPP.

The licensee implemented a corrective action program that included documentation of deficiencies. The corrective action program was found to be effective in implementing appropriate corrective actions to address licensee identified deficiencies.

The inspectors reviewed the licensee's training program. The training requirements are provided in Section 2 of the RPP. The inspectors reviewed the training records for 2017-

2018. The licensee provided orientation training in 2017 for pilot test workers. Radiation worker training was also provided to individuals who may work with radioactive material. In addition, the licensee provided annual refresher training in 2018 via self-study for workers who previously received site access training.

The inspectors conducted site tours to observe site conditions including postings and access controls. There were five radioactive material areas and no radiation areas within the licensee controlled area. All radioactive material areas were posted as required by 10 CFR 20.1902. The licensee controlled physical access to the site with fences and gates.

The inspectors conducted radiological surveys during site tours using a Thermo Radeye Model G survey meter (serial number 0372; calibration due date 3/13/19). With a background of 13 microRoentgen per hour ($\mu\text{R/hr}$), the measured exposure rates ranged from 7-17 $\mu\text{R/hr}$. The surveys included the five radioactive material areas. The inspectors confirmed that no area required posting as a radiation area (greater than or equal to 5,000 $\mu\text{R/hr}$).

2.3 Conclusions

The licensee implemented a radiation protection program that met the requirements of 10 CFR Part 20 and the license. The licensee's radiation protection program was commensurate with the risk involved based on licensee activities and included the required program elements.

3 **Effluent Control and Environmental Protection (IP 88045)**

3.1 Inspection Scope

Determine if the environmental and effluent monitoring programs are adequate to monitor the impacts of site activities on the local environment. Specifically, determine if the effluent control and environmental monitoring programs were being conducted in accordance with the license and procedural requirements and in a manner that supports the principles of ALARA.

3.2 Observations and Findings

License Condition 26 requires in part, that the licensee shall conduct the radiation protection program in accordance with the RPP. Section 15 of the RPP requires the licensee to collect 25 ground water samples, 7 surface water samples, and 11 soil samples, with sampling frequencies that vary by location and type as detailed in Table 15-1 of the RPP. Sampling was most recently performed during the week of November 5, 2018. Samples were primarily analyzed for uranium, fluoride, nitrate (NO_3) gross beta, and gross alpha. At the time of the inspection, the licensee had not received the most recent sample results from its laboratory; therefore, the results were unavailable for review. The results of the annual environmental monitoring are submitted to the NRC via annual environmental reports. The last three annual reports of environmental monitoring were submitted to the NRC on August 16, 2016, June 30, 2017, and August 23, 2018 (ADAMS Accession Nos. ML16244A518, ML18361A737, and ML18361A916, respectively).

Optically stimulated luminescence (OSL) dosimeters were posted at 14 locations onsite in accordance with the requirements of the RPP. These dosimeters were exchanged quarterly and any result greater than or equal to 20 millirem above background results in immediate notification of the Radiation Safety Officer. A review of environmental OSL dosimeter records for CY2016 and CY2017 was performed. No dosimeter results were at or above the action level.

3.3 Conclusions

The licensee conducted environmental monitoring in accordance with license and procedural requirements. The licensee reported the results in annual reports to the NRC.

4 **Closeout Inspection and Survey (IP 83890)**

4.1 Inspection Scope

The inspectors reviewed the licensee's decommissioning history and associated radiological surveys for any changes since the last inspection to ensure compliance with license requirements.

4.2 Observations and Findings

The NRC had previously approved for release significant portions of the property. The site had been divided into fifteen subareas, labeled A through O. The NRC approved for release subareas A, B, C, D, E, H, I, J, K, L, M, and O. Subareas G and N were releasable for unrestricted use, but the NRC determined that these two areas, along with subarea F, will remain under the NRC license until groundwater remediation due to these three areas having groundwater concentrations that exceed the site-specific release criteria of 180 pCi/L total uranium. The three areas with groundwater concentrations that have been shown to exceed the release criteria are BA1, Western Alluvial Area, and Western Upland Area. A revised DP for the Cimarron facility was submitted to NRC on December 31, 2015 (ADAMS Accession No. ML16032A247). The NRC requested additional information about the proposed DP by letter dated April 7, 2016 (ADAMS Accession No. ML16091A427). The licensee provided a response to the request for information on May 20, 2016 (ADAMS Accession No. ML16154A741). The DP was considered acceptable for technical review on September 6, 2016 (ADAMS Accession No. ML16197A056), and the NRC started its formal review of the DP. Additional requests for information and other correspondence related to the DP occurred until November 28, 2017, when the NRC stated via email that they had "no questions regarding the approaches proposed by the licensee to address the groundwater and remedial design related requests for additional information associated with the Cimarron site DP" (ADAMS Accession No. ML17338A838).

Due to the fact that the initial cost estimate in the DP indicated that funding was not sufficient for the site to meet both the NRC and State release criteria, the licensee initiated a review of processes to identify cost savings or reduce uncertainties associated with the groundwater remediation plan. Several sections of the original DP were removed from the plan with State and NRC approval as cost saving measures. During this process, the NRC and the licensee discussed the need to conduct a pilot test for treatment of groundwater before investing money in the full-scale treatment.

The licensee conducted the pilot test in late CY2017 and early CY2018 for the treatment of groundwater for BA1, UP2, UP1, and 1206 Drainage area and documented the results in a report dated May 17, 2018 (ADAMS Accession No. ML18165A403). The results of the pilot test resulted in proposed changes to the 2015 DP. The revised DP was submitted to the NRC on November 2, 2018 (ADAMS Accession No. ML18323A195). At the time of the inspection, the NRC's Office of Nuclear Material Safety and Safeguards was reviewing the revised DP.

To support the pilot test, the licensee's contractor conducted a qualitative radiological survey in 2017 before and after the pilot test. The survey included a pre-construction and post-construction ambient gamma radiation scan survey of land areas that would be impacted by the pilot test. The areas surveyed included BA1, BA1 stockpile, UP1, UP2, and dry detention area (area where soil was stockpiled). The inspectors reviewed the contractor's survey results. The survey results indicated that no area of elevated surface radioactivity was identified prior to construction activities, and none were created as a result of construction or pilot test activities.

4.3 Conclusions

The licensee's facility had been divided into 15 subareas, 12 of these subareas have been released by the NRC for unrestricted use. Subareas F, G and, N remain on the license pending groundwater remediation. A pilot test of the proposed groundwater remediation was conducted in 2017-2018. The pilot test resulted in changes to the proposed DP. The inspectors reviewed a qualitative radiological survey that was conducted by the licensee in 2017. The results of the survey indicated that pilot test operations did not result in surface contamination in the areas where the test was conducted.

5 **Maintenance and Surveillance of Safety Controls (IP 88025)**

5.1 Inspection Scope

Determine if the licensee's radiological survey instruments, used to perform personnel surveys, area surveys, and release of materials and equipment, were calibrated at the proper frequency and in accordance with the licensee's procedures and any regulatory or license requirements.

5.2 Observations and Findings

Section 7 of the RPP established radiological survey instrument calibration criteria for the instruments maintained by the licensee for personnel and equipment surveys. The inspectors reviewed the calibration information for the five radiation survey instruments which were onsite, and available for use at the time of the NRC inspection. All instruments were determined by the inspectors to be calibrated and were appropriately labeled with calibration information in accordance with the requirements of the RPP.

The licensee also had two air samplers in its inventory, but both of these air sampler calibrations expired in March 2018. Neither air sampler had been used since March 2018, and the licensee indicated the air samplers would be calibrated before being placed into service. A review of survey records indicated that no radiological data was collected using an out-of-date calibration instrument.

5.3 Conclusion

The licensee maintained its instrument calibration program in accordance with license requirements.

6 Low Level Radioactive Waste Storage (IP 84900)

6.1 Inspection Scope

Determine if the licensee's low level radioactive waste storage program and standard operating procedures are adequate to protect the safety and health of employees, members of the public, and the environment.

6.2 Observations and Findings

Section 11 of the RPP provides the instructions for control of radioactive materials. The site currently stores a small amount of radioactive material onsite in the administrative building. The area is posted as a radioactive materials area. These materials include a small carboy containing liquid, a 55-gallon drum containing spent resins, and another 55-gallon drum containing soils and equipment. All wastes in storage area are either from the recent pilot test or the previous pilot test conducted in CY2013.

To monitor for potential exposures to workers and the public, the licensee performed monthly surveys of the storage area and maintained an environmental OSL in the storage area.

The inspectors conducted an independent survey of the storage area. The highest measured dose rate near the drums and carboy stored in the area was 14 $\mu\text{R/hr}$, with a background of 11 $\mu\text{R/hr}$. Measurements of the dose rates on the exterior wall of the building were indistinguishable from background. All measurements were made using a Ludlum 2401-S survey meter (serial number 181518; calibration due date April 2, 2019). The licensee indicated it intends to continue to store this material in its current location until they have generated sufficient low level waste to make a shipment of waste for offsite disposal.

During excavation activities for the pilot test in UP1, the licensee's contractors identified a concrete block with fixed radiological contamination. The block was moved, covered with a tarp, and posted as a radioactive materials area in accordance with 10 CFR 20.1902(e). During site tours, the inspectors noted that the block continued to be covered and posted as a radioactive materials area pending future disposal.

The licensee continues to possess two frac tanks used during the pilot test, and two empty, but internally contaminated, waste storage tanks from previous remediation work. The licensee plans to survey and release the tanks. All tanks were stored in the licensee's controlled area and appropriately posted as radioactive material areas. Surveys on the outside of these tanks indicated radiation levels just slightly above background.

6.3 Conclusions

The licensee was storing and handling low level radioactive wastes onsite as required by regulatory and license requirements.

7 **Emergency Preparedness (IP 88050)**

7.1 Inspection Scope

Determine if the licensee's emergency preparedness program is adequate to protect the safety and health of employees, members of the public and the environment.

7.2 Observations and Findings

License Condition 27.a references the licensee's DP dated April 19, 1995 (ADAMS Accession No. ML083470358). Section 3.1 of the 1995 DP indicates that the decommissioning program included an emergency plan. The NRC approved the 1995 DP via Amendment 15 to the SNM license on August 20, 1999 (ADAMS Accession No. ML16204A240). The associated Safety Evaluation Report (ADAMS Accession No. ML092680911) describes the emergency planning program that was approved by the NRC. The program consisted of emergency procedures as provided in the licensee's health and safety program document. The potential emergencies included accidents, accidental releases, fires, explosions, and natural disasters. The health and safety program document also provided the emergency plan training requirements.

At the time of the inspection, the licensee had implemented its corporate-wide safety and health policy for industrial safety. This document, "Burns McDonnell Site Specific Safety and Health Plan," was adopted by the site on August 28, 2017. The inspectors reviewed the safety and health plan and found it to be commensurate with the current site hazards. Section 8.2.25 of the Site Specific Safety and Health Plan provided some of the training requirements including hazardous worker training. The licensee's records indicated that employees had received this training.

7.3 Conclusions

The licensee maintained and implemented standard operating procedures associated with emergency preparedness and safety sufficient to meet the requirements of the application. Employees and visitors were provided with training as applicable.

8 **Exit Meeting Summary**

The NRC inspectors presented the inspection findings to the licensee's representatives at the conclusion of the onsite inspection on November 28, 2018. During the inspection, the licensee did not identify any information reviewed by the inspectors as proprietary.

SUPPLEMENTAL INSPECTION INFORMATION

Partial List Of Persons Contacted

Licensee Personnel

Jeff Lux, P.E., Project Manager, Environmental Properties Management, LLC
Jay Maisler, CHP, Radiation Safety Officer, Enercon
Chuck Beatty, Quality Coordinator, Enercon
Dane Kaiser, Radiation Protection Technician, Enercon

Inspection Procedures (IP) Used

IP83822	Radiation Protection
IP83890	Closeout Inspection and Survey
IP84900	Low Level Radioactive Waste Storage
IP87104	Decommissioning for Materials Licensees
IP88005	Management Organization and Controls
IP88025	Maintenance and Surveillance of Safety Controls
IP88045	Effluent Control and Environmental Protection
IP88050	Emergency Preparedness

Items Opened, Closed and Discussed

Opened

None

Closed

None

Discussed

None

List of Acronyms

ADAMS	Agencywide Documents Access and Management System
ALARA	As Low As is Reasonably Achievable
AP	Activity Plan
BA1	Burial Area #1
CFR	<i>Code of Federal Regulations</i>
CY	Calendar Year
DP	Decommissioning Plan
IP	NRC Inspection Procedure
μR/hr	microrentgen per hour
NRC	U.S. Nuclear Regulatory Commission
OSL	optically stimulated luminescence
pCi/L	picocurie per liter
RPP	Radiation Protection Plan
QA	Quality Assurance
QAPP	Quality Assurance Program Plan
UP1	Uranium Pond #1
UP2	Uranium Pond #2

CIMARRON URANIUM PLANT NRC INSPECTION REPORT 070-00925/2018-002 – DATED
JANUARY 10, 2019

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■ SUNSI Review By: MRP	ADAMS ■ Yes □ No	■ Non-Sensitive □ Sensitive	■ Publicly Available □ Non-Publicly Available	Keyword: NRC-002
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