

U.S. NUCLEAR REGULATORY COMMISSION

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**Environmental Assessment for License Amendment 19 of Cimarron Corporation's
License Regarding License Conditions 22, 23, and 27e. (TAC #L60527)**

License No. SNM-928

**Kerr McGee Cimarron Corporation Former Fuel Fabrication Facility
in Crescent, Oklahoma**

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) is considering amending License SNM-928 for the Kerr McGee Cimarron Corporation former fuel fabrication facility in Crescent, OK. By letter dated August 19, 2003, the licensee, Cimarron Corporation, requested amendments to License Conditions 22, 23, and 27e. Pursuant to discussions with NRC staff, Cimarron supplemented this request in a letter dated December 11, 2003.

The actions being requested are to: (1) delete License Condition 22, as the specific requirements of this condition have been completed; (2) revise License Condition 23, as some of the specific requirements have been completed; and (3) revise License Condition 27e to enable certain changes to radiation protection program procedures under the authority of Cimarron's Corporate Radiation Safety Officer (RSO).

An earlier, and more extensive Environmental Assessment (EA), was prepared for License Amendment No. 15 for the NRC staff evaluation and approval of the Cimarron Decommissioning Plan (DP). That EA is summarized in the *Federal Register* notice of the Finding of No Significant Impact, published August 12, 1999 (64FR44059). The NRC staff determined that all steps of the proposed decommissioning activities could be accomplished in compliance with the NRC public and occupational dose limits, effluent release limits, and residual radioactive material limits. In addition, the staff concluded that the approval of the decommissioning activities at the Cimarron site, in accordance with the conditions in NRC license SNM-928 and the DP, would not result in a significant impact on the environment. As that EA addressed all steps of the proposed decommissioning activities, it was not necessary to revisit these activities in the EA this action.

I. INTRODUCTION

The Kerr-McGee Corporation (KMC) operated two plants at the Cimarron facility between 1965 and 1975, each under its own separate Atomic Energy Commission license. Radioactive Materials License SNM-928 was issued for the Uranium Fuel Fabrication Facility, and Radioactive Materials License SNM-1174 was issued for the Mixed Oxide Fuel Fabrication (MOFF) Facility. In 1983, KMC was divided into Sequoyah Fuels Corporation (SFC) and Quivera Mining Corporation, and SFC became the owner of the Cimarron Facility. Subsequently, in 1988, the Cimarron Corporation (Cimarron), a subsidiary of KMC, became owner of the Cimarron Facility. License SNM-1174 for the MOFF Facility was terminated on

February 5, 1995. Under license SNM-928, Cimarron is conducting its decommissioning activities for the Uranium Fuel Fabrication Facility to meet the Site Decommissioning Management Plan criteria for unrestricted release.

II. THE PROPOSED ACTION

The proposed action is to delete License Condition 22, and revise License Conditions 23 and 27e of License SNM-928 as described in this section of the EA.

License Condition 22

License Condition 22 authorizes the licensee to breach the berms, close the two East and West Sanitary lagoons in Subarea L, and backfill the former burial ground in Subarea F. Cimarron backfilled the two sanitary lagoons in 1993. An NRC confirmatory survey of Subarea L demonstrated that all soil samples were below the NRC's release criteria in License Condition 27 of Cimarron's license (SNM-928) and the regulatory limits for unrestricted use.

The licensee requested that License Condition 22 be deleted from the license. In its letter of August 19, 2003, the licensee stated that the specific requirements of this license condition had been completed and that there was no further need for this condition.

License Condition 23

License Condition 23 authorizes the licensee to dispose of low-enriched uranium contaminated soil (up to 100 pCi/g for soluble uranium and up to 250 pCi/g for insoluble uranium) in an on-site burial cell located in Subarea N.

On June 24-27, 2002, NRC staff conducted a confirmatory survey of the burial cell in Subarea N. The staff determined that the burial cell had been completed in accordance with License Condition 23. All measurements were below the release criteria of License Condition 27 of Cimarron's license (SNM-928) and the regulatory limits.

In its letter of August 19, 2003, the licensee noted that all requirements in this license condition had been met except for the action described in the last two sentences contained in License Condition 23d. Those sentences state, "The licensee shall periodically monitor the disposal area for subsidence, erosion, and status of the vegetative cover for at least 5 years, and promptly repair any problems noted. Any additional measures necessary to prevent recurrence of determined problems shall be undertaken." With the exception of these two sentences, the licensee requested that the other conditions in License Condition 23 be deleted from the license.

License Condition 27e

License Condition 27e authorizes the licensee to make certain changes to the DP or radiation protection plan (RPP) and associated procedures without prior NRC approval provided that those changes meet the specific criteria stated in License Condition 27e.

By letter dated August 19, 2003, and as supplemented by letter dated December 11, 2003, Cimarron requested that License Condition 27e be amended to clarify that only changes to the facility or process, tests, and experiments described in the RPP or the DP require review and approval of its As Low As Reasonably Achievable (ALARA) Committee. In addition, the licensee requested that the license condition be revised to clarify that changes to the associated radiation protection procedures would only require review by the RSO.

In its letter of August 19, 2004, Cimarron noted that although changes to the NRC-approved RPP or DP documents require the review of the ALARA committee, changes to associated procedures such as the calibration of equipment or performance of surveys should only require review and approval by the RSO. As the RSO has first hand knowledge of these procedures, this request would streamline the process for authorizing changes in the associated procedures and still be protective of public health and safety.

III. PURPOSE AND NEED FOR THE PROPOSED ACTION

The proposed action is to delete License Condition 22 and revise License Condition 23 and 27e. Most of the actions required by license conditions 22 and 23 have already been completed. In addition, License Condition 27e would be modified so changes to radiation protection program procedures only need to be reviewed and approved by Cimarron's RSO instead of requiring review and approval by the ALARA Committee. Changes to the RPP or DP would still require review of the ALARA Committee.

IV. ALTERNATIVES TO THE PROPOSED ACTION

The Commission has considered but rejected the "no-action" alternative of not granting the requested amendments to License SNM-928. This alternative would result in unnecessary burden on the licensee by retaining license conditions which include actions the licensee has already taken and by not permitting the license flexibility such that certain changes to RPP or DP procedures may be approved by the licensee's RSO rather than the ALARA Committee. The environmental impacts of the proposed action and the alternative are similar.

V. THE AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

The affected environment and radiological and non-radiological impacts of the decommissioning of this site are discussed in detail in the EA referred to earlier and prepared for approval of the DP for the site. The proposed action would not result in changes to the radiological or non-radiological impacts as described in the EA. The environmental impacts of decommissioning activities are included in the EA issued to support the NRC staff's approval of Cimarron's DP (License Amendment 15, dated August 20, 1999). As the environmental impacts associated with the proposed revision of the license were bounded by the evaluations in the 1999 EA, further environmental review is not needed for this action.

The proposed revision of the license is also consistent with the Cimarron DP which was approved by License Amendment 15, dated August 20, 1999.

VI. AGENCIES AND PERSONS CONTACTED

NRC staff has consulted with the Oklahoma Department of Environmental Quality (ODEQ), in the preparation of this EA. By e-mail dated May 18, 2005, ODEQ stated that "We have reviewed the EA for Cimarron License Amendment 19 and have no objections to the report."

NRC staff has determined that the proposed action will not affect endangered species or critical habitat. Therefore, no further consultation is required under Section 7 of the Endangered Species Act. Likewise, NRC staff has determined that the proposed action is not the type of action that has the potential to cause effects on historic properties. Therefore, no further consultation is required under Section 106 of the National Historic Preservation Act.

VII. CONCLUSION AND FINDING OF NO SIGNIFICANT IMPACT

NRC staff reviewed the request to delete License Condition 22 and concluded that all work addressed in License Condition 22 has been completed and that all the requirements of this condition have been met. Therefore, the NRC staff finds that this condition can be deleted from the license without a significant impact on the environment.

The NRC staff has reviewed the licensee's request to revise License Condition 23 and determined that the licensee has met all of the requirements of License Condition 23 except for the last two sentences of License Condition 23d. This license condition will be revised and the last two sentences will now be License Condition 23a. This revision will not have a significant impact on the quality of the human environment.

The NRC staff has reviewed the request to amend License Condition 27e and determined that the proposed revision will not have a significant impact on the quality of the environment.

Based on the analysis in this EA the NRC staff concludes that the proposed amendments to License SNM-928, will not have a significant effect on the quality of the human environment and has determined that an environmental impact statement for the proposed action is not necessary. This conclusion will be documented in the *Federal Register*.

VIII. LIST OF REFERENCES

1. August 19, 2003, Letter from Cimarron to Kenneth Kalman requesting amendment of License Conditions 22, 23, and 27e.
2. December 11, 2003, Letter from Cimarron to Kenneth Kalman regarding amendment of License Condition 27e.
3. Cimarron Corporation, "Decommissioning Plan for Cimarron Corporation's Former Fuel Fabrication Facility" April 1995.
4. Nuclear Regulatory Commission, "Environmental Assessment by the Office of Nuclear Material Safety and Safeguards of the Proposed Decommissioning Plan and Other Proposals Related to the Cimarron Corporation Former Fuel Fabrication Facility." July 29, 1999.
5. NRC Inspection Report 70-925/99-02 Confirmatory Survey of Subarea L, U.S. Nuclear Regulatory Commission, February 23, 2000.
6. Branch Technical Position, "Disposal or Onsite Storage of Thorium or Uranium Wastes from Past Operations", *Federal Register* Vol. 46, No. 205, 52061, October 23, 1981.
7. NRC Inspection Report 70-925/02-01 Confirmatory Survey of Subarea N, U.S. Nuclear Regulatory Commission, September 18, 2002.
8. E-mail from David Cates, Oklahoma Department of Environmental Quality, Re: "Draft EA for Cimarron License Amendment 19 - Draft EA Attached," May 18, 2005

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7. NRC Inspection Report 70-925/02-01 Confirmatory Survey of Subarea N, U.S. Nuclear Regulatory Commission, September 18, 2002.
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