

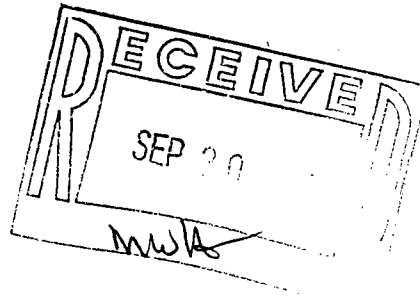
CIMARRON CORPORATION

P. O. BOX 25861 • OKLAHOMA CITY, OKLAHOMA 73125

September 20, 1996

S. JESS LARSEN
VICE PRESIDENT

Mr. Kenneth L Kalman, Project Manager
Facilities Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001



Re: NRC letter dated August 16, 1996 from Mr. Ken Kalman to Mr. Jess Larsen

Docket No. 70-0925
License SNM-928
Amendment Request

Dear Mr. Kalman:

The purpose of this letter is to respond to the above-referenced letter in which the NRC requested that Cimarron Corporation "... 1) review the November, 1994 submittal and identify all additional modifications, revisions, and deletions since the November, 1994 request was originally submitted, and (2) provide suggested language for all proposed changes to the license."

Cimarron Corporation originally submitted a license amendment request to the NRC on November 15, 1994 for the purpose of revising the license to delete sections of the license which were no longer applicable. As stated in the November, 1994 license amendment request, much of the information contained in Appendix A and Annex A is no longer applicable to current Cimarron site operations and contains numerous references to regulations and regulatory requirements which are now incorrect and/or have been superseded by more recent regulatory requirements. In addition, any of the relevant information previously contained in Appendix A and Annex A has been incorporated into the Cimarron Radiation Protection Program or the "new Annex A". Due to the period of time which has elapsed since that submittal, several additional sections of the license are now also in need of revision and/or deletion. In addition, the NRC also requested that Cimarron Corporation "...submit a description of the Cimarron Radiation Protection Program." to replace the "Appendix A" which is currently referenced in the license.

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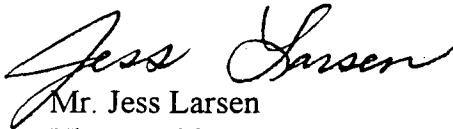
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Cimarron Corporation has prepared three (3) documents as requested by the NRC to address the issues listed above. These three documents are attached hereto and are described below:

1. Detailed listing of specific "modifications, revisions, and deletions" as recommended by Cimarron Corporation.
2. Proposed License SNM-928, Amendment No. 14 wording.
3. Cimarron Radiation Protection Program Description which is titled "Annex A".

Your assistance in the prompt review and approval of these items and the original November 15, 1994 License Amendment request is greatly appreciated. Please feel free to contact me if there are any additional questions or concerns.

Sincerely


Mr. Jess Larsen
Vice President

Enclosures

PROPOSED LICENSE

Cimarron Corporation

123 Robert S. Kerr, MT-2006
Oklahoma City, OK 73102

SNM-928

Amendment No. 14

June 30, 1995

070-00925

A. Uranium enriched to
≤ 5.0 wt. % in U-235

A. Any compound

A. 1200 grams of
contained U-235

B. Uranium enriched to
> 5.0 wt. % in U-235

B. Any Compound

B. **100 grams of
contained U-235

C. Natural and depleted
uranium source material

C. Any Compound

C. 2000 kilograms uranium

*These possession limits were discussed and agreed upon with W. J. Shelley of Kerr-McGee Nuclear Corporation on August 19, 1982.

**If during the decontamination of the facilities and equipment at the Cimarron Plant, uranium solutions or compounds are generated that have a U-235 isotopic content greater than 5.0 wt. %, prompt action shall be taken to degrade these materials to below 5.0 wt. % U-235.

9. Authorized Place of Use:

The licensee's Cimarron Uranium Plant, located ½ mile North of the Highway 33 and Highway 74 junction near Crescent, Oklahoma.

In accordance with letters dated November 15, 1994 and September 20, 1996, SNM-928 is amended as follows:

Condition 10 is amended to read:

10. For use in accordance with statements, representations, and conditions contained in letters dated March 28, 1984, September 28, 1984, October 8, 1984, August 6, 1985, November 19, 1985, March 3, 1986, February 19, 1987, October 14, 1988, November 17, 1988 and November 2, 1989; letters dated September 11, 1991, and June 24, 1992; letters dated September 4, 1987, March 21, 1988, June 29, 1988, October 9, 1989, February 1, 1990, May 15, 1990, February 25, 1993, April 19, 1994, May 31, 1994, June 15, 1994, and July 20, 1994; July 21, 1994, August 8, 1994, and September 21, 1994 and November 3, 1994; letters dated December 16, 1994, and June 5, 1995; letters dated January 22, 1996, and January 23, 1996; letters dated August 9, 1995, and November 13, 1995; and letters dated November 15, 1994 and September 20, 1996.
11. DELETED
12. DELETED
13. DELETED
14. DELETED
15. DELETED
16. DELETED
17. DELETED
18. The licensee shall dispose of the radioactive contaminated solid waste generated by licensed activities at a licensed low-level waste disposal site.
19. The licensee is exempt from the provisions of 10 CFR 70.24 insofar as this section applies to materials held under this license.
20. DELETED
21. DELETED
22. This condition deletes the restriction to backfill the two settling ponds (sanitary lagoons) as prohibited by License Condition 17, and authorizes the licensee to proceed with the breaching of the berms and the closure of the two sewage lagoons.

The settling ponds are described as the east and west sanitary lagoons occupying an area of approximately 6,600 square meters located just east of the Plutonium Plant and northeast of the Uranium Plant.

This condition also authorizes the licensee to backfill the former burial ground. The former burial ground occupies approximately 8,600 square meters and is located at the northeast edge of the site. The former burial ground includes four trenches located within a fenced area.

- a. In collecting soil for backfill and cover of the lagoons and the former burial trenches, additional measurements will be made, including walkover surveys with a gamma scintillation instrument. An isotope analyses of soil samples shall also be conducted. Both the lagoons and the burial trenches will be gridded on a 10 meter basis and evaluated for concentrations of uranium not greater than 30 microcuries per gram, and concentrations of thorium not greater than 10 picocuries per gram.
 - b. The soil used for fill material and cover material shall be compacted to minimize subsidence, and the cover material shall be contoured to the minimum slope that provides adequate drainage consistent with conforming to the original shape of the land.
 - c. Cimarron Corporation (Kerr-McGee) shall provide to the Oklahoma State Department of Health whatever information is required to satisfy state requirements on the presence/absence of potentially toxic substances or any other nonradioactive constituents of the fill and cover soil.
 - d. The licensee shall reseed/revegetate the barren soil cover of both remediated sites with vegetation indigenous to the area, in a manner consistent with preventing erosional gullyng of the protective cover.
 - e. The licensee shall insure that all policies and site-specific standards are applied in a manner that is consistent with practices that are ALARA.
23. The license is authorized to bury up to 14,000 cubic meters (500,000 cubic feet) of soil contaminated with low-enriched uranium, in the Branch Technical Position Option 2 concentration range, in the location described in the licensee's October 9, 1989, submittal to the NRC. The Branch Technical Position Option 2 concentration range is up to 100 pCi/g for soluble uranium and up to 250 pCi/g for insoluble uranium.
- a. If the average concentration of soil earmarked for disposal is determined to be above 100 pCi/g, the solubility of the uranium compounds in the soil in question must be determined using a method approved by the NRC. The acceptability of the soil for disposal as Option 2 material shall be ascertained by the formula:

Enriched Uranium Limit (pCi/g) = $170 / [(F1)(0.68) + (1-F1)(2.0)]$ where F1 is the insoluble fraction

For cases where the above equation results in a limit that is less than 100 pCi/g (i.e., when the soluble fraction exceeds 75 percent), the limit will be equal to 100 pCi/g.

- b. The average concentrations of the thorium and plutonium in the soil earmarked for disposal shall not exceed 10 pCi/g and 1 pCi/g, respectively.
 - c. A relatively impermeable barrier, such as a clay dam, shall be placed across the access road cut at the northwest corner of the soil disposal cell at project completion.
 - d. Both the soil placed in the disposal cell and the cover material shall be compacted in lifts not to exceed 0.3 meter (1 foot), to 95 percent of maximum dry density as determined by the Standard Compaction Test, ASTM D698. Density testing shall be performed over the entire lift thickness. The cell cover shall be contoured to the minimum slope that provides adequate drainage consistent with conforming to the original shape of the ridge, and nowhere shall exceed 6 percent slope. A permanent vegetative cover shall be promptly reestablished to help minimize erosion potential. 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.
 - e. Notification shall be placed on the land title to declare that uranium-contaminated soil has been buried on the site and to record the volume, average uranium concentration, and exact location of the buried soil. This notification is not to be considered a restriction on the sale or future use of the site. Furthermore, cairns (permanent markers) shall be placed at the corners of the disposal cell when the burial is completed.
 - f. Licensee shall maintain and implement procedures and engineering controls, to the extent practicable, to achieve occupational doses and doses to members of the public that are as low as reasonably achieved.
24. Ms. Karen Morgan is the Radiation Safety Officer for the Cimarron Corporation Uranium Plant.
25. The areas designated as "Phase I" in Drawing No. 95MOST_RF3, from the Licensee's November 13, 1995, letter to NRC, are released for unrestricted use and removed from License No. SNM-928. The Phase I areas are no longer licensed by NRC.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

SUMMARY OF LICENSE CHANGES

1. License Condition No. 3.

Changed from Amendment No. 13 to Amendment No. 14.

2. License Condition No. 10

Deleted reference to "Appendix A of the licensee's application dated September 13, 1976, supplements dated September 18, 1979, and March 29, 1982" and replaced with "and letters dated November 15, 1994 and September 20, 1996". The Radiation Protection Program Description, referred to as "Annex A" and submitted to the NRC under Cimarron Corporation letter dated September 20, 1996 addresses all issues previously contained in Appendix A.

3. License Condition No. 11

Deleted License Condition No. 11 as all issues associated with this license condition are now addressed in Annex A.

4. License Condition No. 12

Deleted License Condition No. 12 as all issues associated with this license condition are now addressed in Annex A.

5. License Condition No. 13

Deleted License Condition No. 13 as all issues associated with this license condition are now addressed in Annex A.

6. License Condition No. 14

Deleted License Condition No. 14 as all issues associated with this license condition are now addressed in Annex A.

7. License Condition No. 15

Deleted License Condition No. 15 as all issues associated with this license condition are now addressed in Annex A.

8. License Condition No. 16

Deleted License Condition No. 16 as all issues associated with this license condition are now

addressed in Annex A.

9. License Condition No. 20

Deleted License Condition No. 20 as the Cimarron Decommissioning Plan for Cimarron Corporation's Former Nuclear Fuel Fabrication Facility at Crescent, Oklahoma, was submitted to the NRC on April 25, 1995.

10. License Condition No. 21

Deleted License Condition No. 21 as all issues associated with this license condition are now addressed in Annex A. In addition, an inner and outer fence is no longer required for the Cimarron facility.