

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, 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		3. License Number	SNM-1999
1. Kerr-McGee Corporation		4. Expiration Date	January 1, 1997
2. Kerr-McGee Center Oklahoma City, OK 73125		5. Docket or Reference No.	70-3073 Amendment No. 3
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. Uranium Enriched in U-235	A. Contaminated soil, sludge, sediment, trash, building rubble, structures, and any other contaminated material.	A. All residual contam- ination which currently exists at the former Cushing Refinery Site.	
B. Thorium	B. Contaminated soil, sludge, sediment, trash, building rubble, structures, and any other contaminated material.	B. All residual contam- ination which currently exists at the former Cushing Refinery Site.	
C. Natural Uranium and Depleted Uranium	C. Contaminated soil, sludge, sediment, trash, building rubble, structures, and any other contaminated material.	C. All residual contam- ination which currently exists at the former Cushing Refinery Site.	
D. U-235	D. Calibration and reference radioactive sources containing U-235	D. No calibration or reference radioactive source containing U-235, shall exceed 0.1 microCurie per source.	

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9. Authorized Use: Licensed material shall be possessed and used in remediation activities leading to the decommissioning of the Cushing Site.
10. Authorized Place of Use: The existing facilities of Kerr-McGee Corporation, Environmental Operations, Technology and Engineering Division, P.O. Box 89, Cushing, OK 74023. Location: Two miles North - State Highway 18, 1/2 mile East - Deep Rock Road.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SNM-1999

Docket or Reference Number

70-3073

Amendment No. 3

11. Conditions:

- A. Kerr-McGee shall submit by license amendment request, before February 1, 1994, a Proposed Decommissioning Plan for the Cushing Site meeting the requirements of 10 CFR 70.38(c)(2)(iii).
- B. Kerr-McGee shall submit, by separate license amendment requests, or as a part of the Proposed Decommissioning Plan, detailed descriptions of the methods for performing the following activities, prior to beginning the activities:
 1. Prior to transferring contaminated material to any of the three temporary storage areas provide an analysis of the ability of the three temporary storage areas to effectively resist erosion by wind and water, and describe the measurement procedures to be used to control the sorting of the contaminated material to be transferred to the temporary storage areas.
 2. Prior to neutralizing the acidic contaminated sludge in Pit 4, describe the methods to be used.
 3. Prior to demolishing potentially contaminated structures, provide a description of the methods to be used.
- C. Both the 8 hour and 2 to 3 hour Health and Safety indoctrination is described in Item 8 of the application shall include all of the topics described in 10 CFR 19.12.
- D. Kerr-McGee shall submit, by license amendment request, before June 1, 1993, the proposed boundaries of all radioactive materials areas designated in accordance with 10 CFR 20.203(e)(2), restricted areas as defined in 10 CFR 20.3, and areas outside of restricted areas, where licensed materials exist which must be secured from unauthorized removal per 10 CFR 20.207.
- E. Notwithstanding statements in the application, the limits listed in "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," Policy and Guidance Directive 83-23, August 1987, shall be used as the criteria for the unrestricted release of equipment, material, and personnel.
- F. All radiation protection program procedures shall, at a minimum, be approved by the Radiation Safety Officer and either the Vice President, Environmental Operations, or the Vice President, Environmental & Health Management.
- G. All work in radioactive materials areas or restricted areas, or work with licensed material not located in radioactive materials or restricted areas, shall be in accordance with an approved radiation safety procedure.

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- H. Wastes disposed offsite shall be classified and meet waste form requirements of 10 CFR Part 61, meet applicable disposal site license conditions, and meet Department of Transportation and 10 CFR Part 71 transportation requirements.
- I. The Radiation Safety Officer for this license is Will Rogers.
- J. Licensee is exempt from the physical protection requirements of 10 CFR 73 and the criticality accident requirements of 10 CFR 70.24.
- K. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with statements, representations, and conditions contained in letter dated September 25, 1992, as supplemented on December 18, 1992, January 14, 1993, and February 23, 1993.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: October 11, 1996

By:

Michael F. Weber

Michael F. Weber, Chief
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

ENCLOSURE 2



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
RELATED TO AMENDMENT NO. 3 TO MATERIALS LICENSE NO. SNM-1999

KERR-McGEE CORPORATION

CUSHING REFINERY SITE

DOCKET NO. 70-3073

1.0 INTRODUCTION

The Kerr-McGee Corporation (the licensee) in its letter dated May 10, 1995, requested the U.S. Nuclear Regulatory Commission (NRC) to amend Materials License SNM-1999 to authorize possession of calibration and reference radioactive sources containing radioisotope uranium-235 (U-235), not to exceed 0.1 microCurie per source.

2.0 BACKGROUND

On April 6, 1993, NRC issued Materials License SNM-1999 authorizing possession of contaminated soil, sludge, sediment, trash, building rubble, and any other contaminated material, at the licensee's Cushing site. One of the sources of contamination at the Cushing site is uranium enriched in U-235.

The licensee has requested the authority to possess calibration and reference radioactive sources containing U-235, in order to have the specific radioisotope to both calibrate equipment and to use as check sources for instruments.

3.0 EVALUATION

The licensee has requested authority to possess U-235 calibration and reference sources. Authorizing the licensee to possess and use these sources on site should enhance the licensee's ability to both calibrate equipment and have check sources for instruments. Thus, improving the licensee's ability to detect and quantify the amounts of U-235 contamination on site.

The licensee has an established radiation protection program at the Cushing site. The staff concluded in NRC Inspection Report 70-3073/96-01, dated June 24, 1996, that "[T]he licensee had implemented a radiation protection program that met requirements established in 10 CFR Part 20 and the license."

The staff has reviewed these proposed changes and concluded that the licensee's request is reasonable and should not adversely effect the public's health or safety based on the existence of the Cushing radiation protection program.

4.0 STATE CONSULTATION

Oklahoma State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment allows the possession and use of calibration and reference radioactive sources containing U-235. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(14)(viii). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: S. Brown

Date: October 4, 1996

Approved: Michael L. Weber, October 11, 1996

- H. Wastes disposed offsite shall be classified and meet waste form requirements of 10 CFR Part 61, meet applicable disposal site license conditions, and meet Department of Transportation and 10 CFR Part 71 transportation requirements.
- I. The Radiation Safety Officer for this license is Will Rogers.
- J. Licensee is exempt from the physical protection requirements of 10 CFR Part 73 and the criticality accident requirements of 10 CFR 70.24.
- K. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with statements, representations, and conditions contained in letter dated September 25, 1992, as supplemented on December 18, 1992, January 14, 1993, and February 23, 1993.

FOR THE NUCLEAR REGULATORY COMMISSION
[Original signed by]

Date: October 11, 1994

By: Michael F. Weber, Chief
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

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Mr. Jeff Lux
Kerr-McGee Corporation
Kerr-McGee Center
P.O. Box 25861
Oklahoma City, OK 73125

SUBJECT: ISSUANCE OF AMENDMENT NO. 3 TO MATERIALS LICENSE NO. SNM-1999,
CUSHING REFINERY SITE (TAC NO. L51419)

Dear Mr. Lux:

The Commission has issued the enclosed Amendment No. 3 to Material's License No. SNM-1999 for the Cushing Refinery Site. This amendment is in response to your application dated May 10, 1995, which requested authority to possess calibration and reference radioactive sources containing U-235, not to exceed 0.1 microCurie per source.

The staff has concluded that this amendment request is acceptable. Accordingly, License No. SNM-1999 is amended as follows:

- 6.
- | | | |
|----------|---|---|
| D. U-235 | D. Calibration and reference radioactive sources containing U-235 | D. No calibration or reference radioactive source containing U-235 shall exceed 0.1 microCurie per source |
|----------|---|---|

All other conditions of the license shall remain the same. The revised License No. SNM-1999, which incorporates Amendment No. 3, and the related Safety Evaluation are enclosed. Further, if you have any questions, please contact me at (301) 415-6605.

Sincerely,
[Original signed by]
Stewart Brown, Project Manager
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 70-3073
License No. SNM-1999

Enclosures: 1. Amendment No. 3 to License No. SNM-1999
2. Safety Evaluation
cc w/encls: Kerr-McGee, Cushing distribution list

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