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STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271

Thomas E. Baca, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

September 10, 1981

Mr. James M. Rosel
Ranchers Exploration and Development Corporation
P.O. Box 6217
Albuquerque, New Mexico 87197

Dear Mr. Rosel:

In accordance with your letter request of September 3, 1981 an amendment to License Number NM-RED-MB-06 is enclosed.

The amendment extends the expiration date of the license to June 30, 1982 and requires a site reclamation plan be submitted to the Environmental Improvement Division at least 90 days prior to mine shutdown for approval.

It is our hope that the experimental data obtained from your mine operation and shutdown will be useful in developing procedures and guidelines for mine backfilling that will benefit both the industry and the state.

Sincerely,

Thomas B. Christiansen

Thomas B. Christiansen
Environmental Scientist
Uranium Licensing Section
Radiation Protection Bureau

TBC/dm
Enclosure

9802270285 810910
PDR ADOCK 07100143
C PDR

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RADIOACTIVE MATERIAL LICENSE

License Number NM-RED-MB-05 is amended to become License Number NM-RED-MB-06

In accordance with Ranchers Exploration and Development Corporation letter received December 17, 1979 signed by Mr. J. F. Swendseid, subject license is amended as follows:

To delete license condition 13.

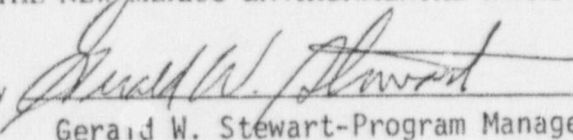
To add license conditions 22 & 23:

22. The licensee's air monitoring program shall consist of the following:
- a. Working level measurements shall be taken at VH-9, VH-10 and VH-11 on a monthly frequency.
 - b. Particulate samples shall be taken at VH-11 (quarterly) and at an underground location (monthly) in the vicinity of the bottom of the bare hole nearest the sandfill location. Samples shall be analyzed for Ra-226, Th-230 and Pb-210.
 - c. Working level measurements shall be provided from the north and south mining areas (this information can be data taken from the mine safety inspections records).
 - d. A record of the sandfill operations shall be forwarded showing dates tons implaced and locations.
 - e. Quarterly reports shall be provided covering items 22.a through d. inclusive.
23. Working level measurements shall be made in the administration building on a weekly frequency for a three months period and provided to EID for review.

FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT

Date January 8, 1980

By


Gerald W. Stewart-Program Manager
Uranium Licensing

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RADIOACTIVE MATERIAL LICENSE

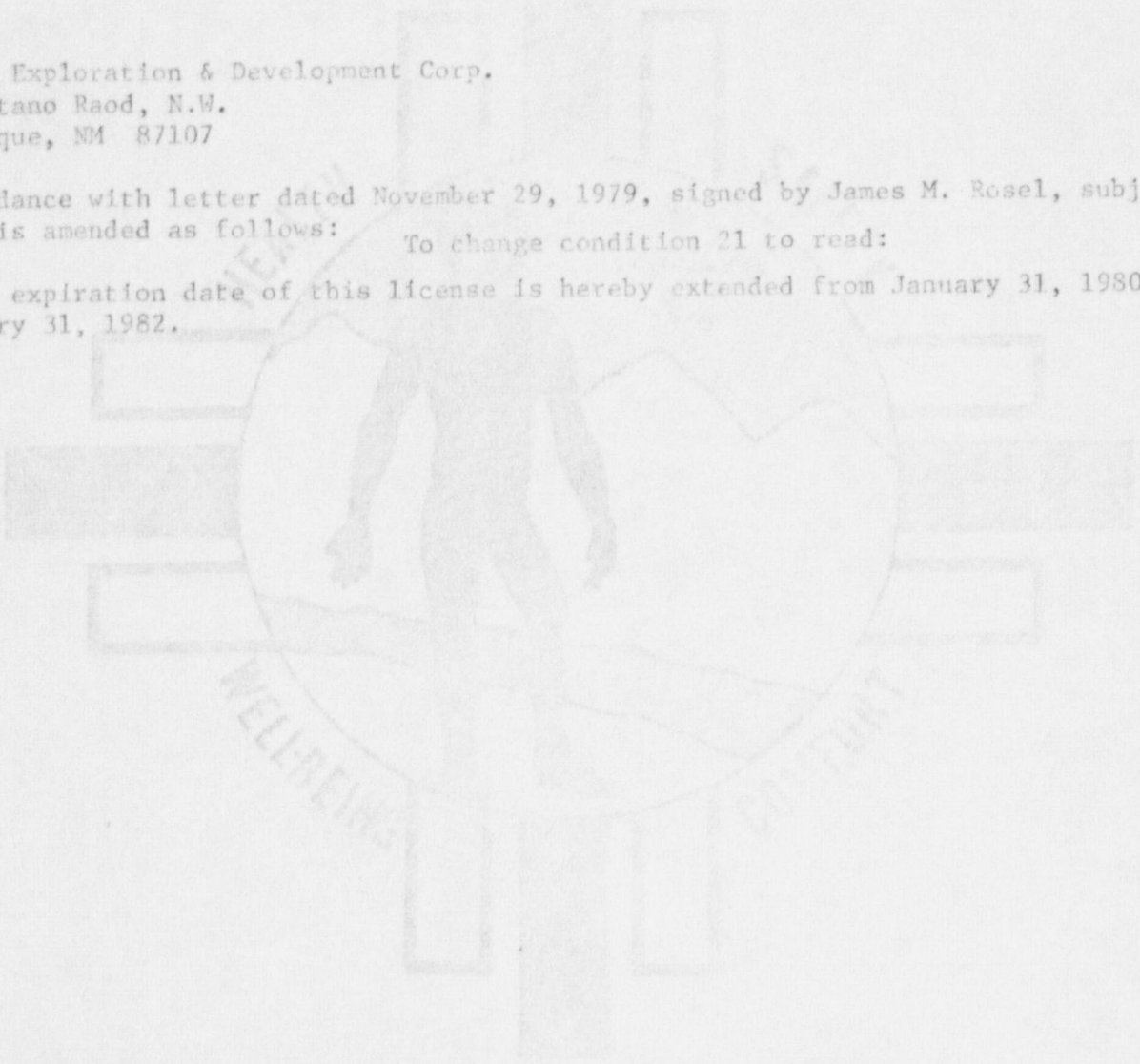
License Number NM-RED-MB-04 is amended to become

License Number NM-RED-MB-05

Ranchers Exploration & Development Corp.
1776 Montano Road, N.W.
Albuquerque, NM 87107

In accordance with letter dated November 29, 1979, signed by James M. Rosel, subject license is amended as follows: To change condition 21 to read:

21. The expiration date of this license is hereby extended from January 31, 1980 to January 31, 1982.



FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION

Date November 30, 1979

By Gerald W. Stewart
Gerald W. Stewart
Program Manager

NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY
RADIOACTIVE MATERIAL LICENSE

License Number NM-RED-MB-03 is amended to become License Number NM-RED-MB-04

Ranchers Exploration & Development Corp.
1776 Montano Road, N.W.
Albuquerque, New Mexico 87107

In accordance with letter dated January 5, 1979, signed by James M. Rosel,
subject license is amended as follows:
To change condition 21 to read:

21. The expiration date of this license is hereby extended from January 31,
1979 to January 31, 1980.

FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY

Date January 18, 1979

By Gerald W. Stewart
Gerald W. Stewart
Environmental Scientist III

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RADIOACTIVE MATERIAL LICENSE

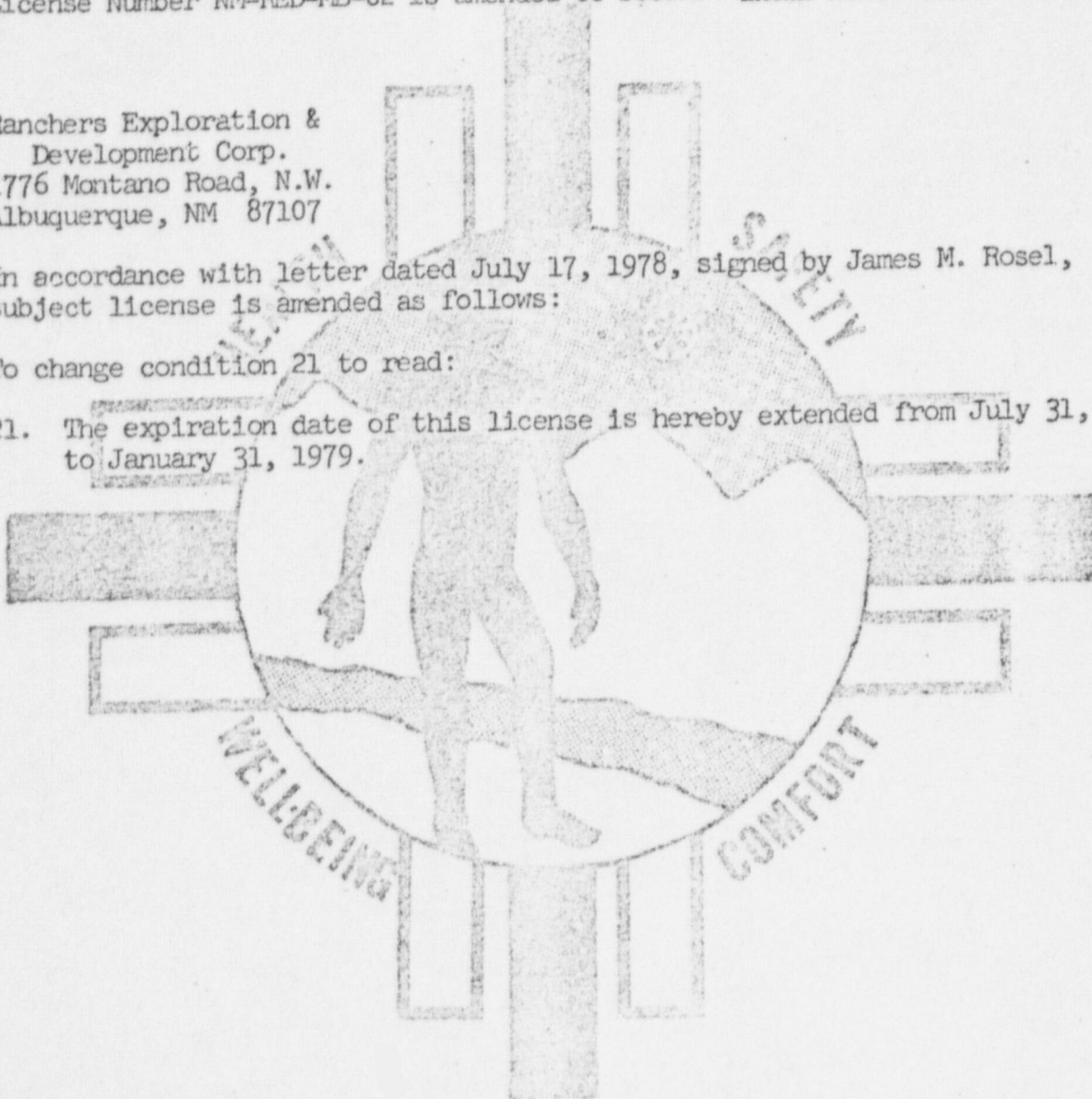
License Number NM-FED-MB-02 is amended to become License Number NM-FED-MB-03

Ranchers Exploration &
Development Corp.
1776 Montano Road, N.W.
Albuquerque, NM 87107

In accordance with letter dated July 17, 1978, signed by James M. Rosel,
subject license is amended as follows:

To change condition 21 to read:

21. The expiration date of this license is hereby extended from July 31, 1978
to January 31, 1979.



FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION

Date July 31, 1978

By Patrick F. Donahoe
Patrick F. Donahoe, Environmental Scientist III

NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY
 RADIOACTIVE MATERIAL LICENSE

License Number NM-RED-MB-01 is amended to become License Number NM-RED-MB-02

Ranchers Exploration &
 Development Corp.
 1776 Montano Road, N.W.
 Albuquerque, NM 87107

In accordance with letters dated January 10, 1978 and February 13, 1978, signed by Roger A. Kauffman, subject license is amended as follows:

To change Conditions 14 and 15 to read:

14. The air monitoring program described in License Condition No. 13 shall be submitted to the New Mexico Environmental Improvement Agency on or before June 19, 1978. This monitoring program shall be executed by the licensee instead of the air monitoring program described in the licensee's application dated June 17, 1977.
15. By March 27, 1978 the licensee shall provide information to the Agency supporting a finding that the licensee's discharge of water contaminants resulting directly or indirectly from licensed activities will not interfere with human health or domestic or agricultural use of ground water at any place of withdrawal for present or reasonable foreseeable future use. Continuance of this license is contingent on Agency approval of said finding by June 19, 1978. This license condition may be fulfilled by the licensee's obtaining on or before June 19, 1978, Agency approval of a discharge plan pursuant to the provisions of New Mexico Water Quality Control Commission Regulations as amended January 11, 1977, and June 14, 1977, and as may be further amended.

To add:

21. The expiration date of this license is hereby extended from February 27, 1978 to July 31, 1978 subject to the above conditions.

FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY

Date February 28, 1978

By

Alphonso A. Topp, Jr.

Alphonso A. Topp, Jr.
 Environmental Scientist III

NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY
RADIOACTIVE MATERIALS LICENSE

License Number NM-RED-MB-00 is amended to become License Number NM-RED-MB-01

Ranchers Exploration &
Development Corp.
1776 Montano Rd., N.W.
Albuquerque, NM 87107

In accordance with letter dated September 6, 1977, signed by Paul A. Matthews, Vice President, Operations; subject license is amended as follows:

To change Conditions 14 & 15 to read:

- 14. The results of the above air monitoring program (License Condition No. 13) shall be reviewed by the New Mexico Environmental Improvement Agency and the licensee on or before November 29, 1977. The above air monitoring program may be modified as a result of the review. The above air monitoring program shall be executed by the licensee instead of the air monitoring program described in the licensee's application dated June 17, 1977.
- 15. By November 29, 1977 the licensee shall provide information to the Agency supporting a finding that the licensee's discharge of water contaminants resulting directly or indirectly from licensed activities will not interfere with human health or domestic or agricultural use of ground water at any place of withdrawal for present or reasonable foreseeable future use. Renewal of this license is contingent on Agency approval of said finding by February 27, 1978. This license condition may be fulfilled by the licensee's obtaining on or before February 27, 1978 Agency approval of a discharge plan pursuant to the provisions of New Mexico Water Quality Control Commission Regulations as amended January 11, 1977, and June 14, 1977, and as may be further amended.

FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY

Date September 20, 1977

By Alphonso A. Topp, Jr.
Alphonso A. Topp, Jr.
Environmental Scientist III

NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY
RADIOACTIVE MATERIALS LICENSE

Pursuant to the New Mexico Radiation Protection Act of 1971, and the Radiation Protection Regulations Part 3, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purposes(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect of the New Mexico Environmental Improvement Agency and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. Name Ranchers Exploration & Development Corp.</p> <p>2. Address 1776 Montano Rd., N.W. Albuquerque, NM 87107</p>	<p>3. License number NM-RED-MB-00</p> <hr/> <p>4. Expiration date February 28, 1978</p> <hr/> <p>5. Reference number</p>	
<p>6. Radioactive materials (element and mass number)</p> <p>A. All natural radioisotopes encountered in uranium mill tailings.</p>	<p>7. Chemical and/or physical form</p> <p>A. Chemical and physical forms encountered in uranium mill tailings.</p>	<p>8. Maximum quantity licensee may possess at any one time</p> <p>A. As necessary for the transfer authorized in Item 9.</p>

CONDITIONS

9. Authorized use. (Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.)
- A. This license authorizes the transfer of uranium mill tailings at a nominal transfer rate of 8,000 tons per month from the Kerr McGee Uranium Mill located at Ambrosia Lake, McKinley County, New Mexico, to the Ranchers Exploration and Development Corporation's Johnny M Mine, San Mateo, New Mexico, and authorizes the use of the received tailings for backfilling evacuated mine stopes on an operational test basis in accordance with the statements, representations, and conditions in the licensee's application dated June 17, 1977, as supplemented by letter dated Feb. 3, 1977 signed by G.D. Milligan, Kerr McGee Corp., and letter dated June 2, 1977 signed by J.E. Cleveland, Kerr McGee Corp.
10. The licensee shall comply with Part 4, New Mexico Radiation Protection Regulations.
11. The licensee is hereby exempt from the requirement of 4-220.E.2 of the Radiation Protection Regulations for areas within the mine and tailings storage areas provided all entrances to the mine and tailings storage areas are conspicuously posted in accordance with 4-220.E.2 and with the words, "Any Area Within This Boundary May Contain Radioactive Material."
12. The licensee shall determine that employees leaving work are not contaminated with radioactive materials. When an employee has showered and changed clothing prior to leaving work, the employee may be assumed to be free of external contamination.

NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY
RADIOACTIVE MATERIALS LICENSE

License Number NM-RED-MB-00

13. The licensee's air monitoring program shall consist of the following:
- A. Radon measurements taken at the north vent, the south vent hole, and the tailings unloading and storage area. The first set of radon measurements shall be taken within a week of the beginning of the tailings transfer operation. The second set of radon measurements shall be taken two weeks after the first set. Subsequent measurements shall be taken at monthly intervals or more frequently.
 - B. Particulate air samples shall be taken at the tailings unloading and storage area and in the area of the mine being backfilled and shall be analyzed for thorium 230, radium 226, and lead 210. Two sets of samples separated by an interval of two weeks shall be taken during the first month of operation. Subsequent measurements shall be taken at monthly intervals or more frequently.
 - C. Working level measurements of radon daughters shall be made at the tailings unloading and storage area and in the area of the mine being backfilled. These measurements shall be made at weekly intervals.
14. The results of the above air monitoring program shall be reviewed by the New Mexico Environmental Improvement Agency and the licensee after three months of operation. The above air monitoring program may be modified as a result of the review. The above air monitoring program shall be executed by the licensee instead of the air monitoring program described in the licensee's application dated June 17, 1977.
15. By September 27, 1977 the licensee shall provide information to the Agency supporting a finding that the licensee's discharge of water contaminants resulting directly or indirectly from licensed activities will not interfere with human health or domestic or agricultural use of ground water at any place of withdrawal for present or reasonable foreseeable future use. Renewal of this license is contingent on Agency approval of said finding by February 27, 1978. This license condition may be fulfilled by the licensee's obtaining on or before February 27, 1978 Agency approval of a discharge plan pursuant to the provisions of New Mexico Water Quality Control Commission Regulations as amended January 11, 1977, and June 14, 1977, and as may be further amended.
16. The location of water monitoring station designated as MWS-3 in the license application dated June 17, 1977 shall be changed to "the drainage liquid collected as close as possible to the most recently backfilled stope".
17. The times at which the water and air vent samples are taken shall be keyed as closely as possible to the completion of the backfilling of each stope such that samples from MW-1, MW-2, MWS-3, VH-9, and VH-10 be taken within two days of the completion of the backfilling and drainage of a particular stope; and samples from UG-4, UG-5, UG-6, GW-7, and GW-8 taken within 2 weeks of the completion of the backfilling and drainage of a particular stope.

NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY
RADIOACTIVE MATERIALS LICENSE

License Number NM-RED-MB-00

18. Isotopic analysis of all water samples shall include Th 230 and Pb 210.
19. Approved waste generating processes and mill tailings management practices may be subject to revision in accordance with the conclusions of the final generic environmental impact statement presently being prepared by the U.S. Nuclear Regulatory Commission (refer to the Federal Register, 41 FR 22430, June 13, 1976) and any related rule making.
20. Except as specifically provided otherwise by the license, the licensee shall possess and use radioactive material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application dated June 17, 1977, signed by J.K. Deuel, and letter dated Feb. 3, 1977, signed by G.D. Milligan, Kerr McGee Corp., and letter dated June 2, 1977, signed by J.E. Cleveland, Kerr McGee Corp.

FOR THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY

Date June 21, 1977

By

Alphonso A. Topp, Jr.
Alphonso A. Topp, Jr.
Environmental Scientist III