



STATE OF NEW MEXICO
INSPECTOR OF MINES DEPARTMENT
2340 MENAUL, N.E., SUITE 106
ALBUQUERQUE, NEW MEXICO 87107

SAFETY FIRST



JOE D. LONGACRE, SR.
STATE INSPECTOR OF MINES

OFFICE TELEPHONE 842-3056
RESIDENCE PHONE 344-1129

RADIATION
REPORT OF INSPECTION

I. D. No. 2900778

Section 17 Mine (Kerr-McGee Nuclear Corporation)

(Name)

Mine

Typed September 9, 1976

August 24, 25, 26, 1976

(Date of Inspection)

Uranium

(Classification of Mine)

McKinley

(County in which located)

Robert Moquino, Environmental Technician

(Company representative present at inspection)

Pursuant to the Mining Laws of the State of New Mexico, Section 63-4-8, an inspection, as designated above, has been made. During this inspection the following was noted:

GENERAL INFORMATION

Owner and Operator: Kerr-McGee
Nuclear Corporation

Location: approximately 25 miles
north of Grants, NM, Ambrosia
Lake mining district.

Employment:
Total 90
Underground 84

Work Schedule:
Hours per day 8
Shifts per day 2
Days per week 5

Company Officials:

Billy Stevens, General Manager
Al Alkhafi, Mine Superintendent
Tony Sanchez, General Mine Foreman
J. Cleveland, Superintendent of Environmental
and Industrial Hygiene

Mining method: modified room and pillar

Previous radiation inspection: June 30, July 1,
1976 and report was posted.

The inspector was accompanied by Mr. Robert Moquino who obtained duplicate samples for comparison purposes. Mr. James Hall, of M.E.S.A., also participated in the inspection and obtained duplicate samples.

The mine was ventilated by some 185,000 c.f.m. of air delivered and exhausted through the following openings:

Opening	Size I.D.	Air Direction	Ventilation c.f.m.	Fan	HP	Depth of Opening
No. 1	36"	upcast	16,000	Joy Series 1000	60	855'
No. 2	36"	upcast	11,600	"	(2)25	806'

9804140046 760909
PDR ADOCK 04008907
C PDR

JOE D. LONGACRE, SR.

State Inspector of Mines

ONE COPY OF THIS REPORT SHALL BE POSTED IN A CONSPICUOUS PLACE AT THE MINE

9804140046

Opening	Size I.D.	Air Direction	Ventilation c.f.m.	Fan	HP	Depth of Opening
No. 3	42"	upcast	8,000	Joy Series 1000	25	734'
No. 4	42"	upcast	25,000	"	(3) 25	833'
No. 5	36"	upcast	4,000	"	(2) 25	690'
No. 6	36"	upcast	9,500	"	(2) 25	682'
No. 7	48"	upcast	50,000	"	(1) 60 - (1) 125	690'
No. 8	48"	upcast	28,000	"	125	682'
No. 9	48"	upcast	33,000	"	(2) 125	1070'
No. 10	42"	upcast	32,000	"	60	724'
Shaft	10'x14'	downcast	185,000	-	-	1090'

Main fans were electrically powered axial flow type units. The primary fans were surface mounted units. Air was distributed to the underground working places by use of auxiliary fans and vent tubing. Air was controlled underground by use of curtains, brattices, bulkheads, air doors and air seals.

Listed below are the radon-daughter concentrations, ventilation volume measurements and the average weighted exposure calculations for the men in each underground working place.

Sample No.	Sample Location	Ventilation c.f.m.	Man-Shift Exposure			Working Level
			M&M	Stopes	Haulages	
1	0606 slusher position	1,500	0.5	1.5		0.1
2	0606 access	4,000	0.5	.5		0.2
3	0608 chute repair	6,000	0.5	2.0		0.1
4	0600 haulage	12,000	0.5		2.0	0.0
5	0100 lunchroom	eddy	0.5			0.0
6	2-3 battery station	convection	0.5		1.0	0.0
*7	6403 No. 2 slusher	600	0.5	1.0		1.5
*8	6403 No. 1 slusher	1,000	0.5	0.5		1.3
*9	6403 access	2,000	0.5	0.5		1.5
10	6400 haulage	9,000	0.5		2.0	0.7
11	6000 lunchroom	eddy	1.0			1.2
12	8604 No. 1 slusher	1,000	0.5	2.0		0.4
13	8604 No. 2 slusher	1,000	0.5	1.0		0.9
14	8604 access	3,000	0.5	1.0		0.7
15	8702 drill and slusher	1,000	0.5	2.0		0.2
16	8700 drift	6,000	0.5		2.0	0.0
17	9300 heading	2,600	0.5	4.0		0.5
18	9206 Chinaman	5,000	0.5	2.0	2.0	0.4
19	9202 slusher	1,500	0.5	2.0		0.5
*20	9203 slusher	1,000	0.5	2.0		1.3
21	9200 drift	8,000	0.5		2.0	0.5
*22	9001 stope exhaust	20,000	0.5			1.1
*23	5802 No. 2 slusher install.	8,000	0.5	1.0		1.4
*24	5802 No. 1 slusher	12,000	0.5	1.0		1.0
25	5903 drill	800	0.5	1.0		0.6
26	5903 access	800	0.5	1.0		0.7
27	5900 haulage	26,000	0.5		2.0	0.6
28	6403 No. 2 slusher	Resample				0.6
29	6403 access	Resample				0.5

Sample No.	Sample Location	Ventilation c.f.m.	M&M	Stopes	Haulages	Working Level
30	6403 No. 1 slusher	Resample				0.4
31	6000 lunchroom	Resample				0.1
32	8604 No. 2 slusher	Resample				0.3
Totals			14	26	13	

The average weighted exposure for the various classes of mine personnel were as follows:

Maintenance and Management - 0.7 x working level
Stopes and Developments - 0.6 x working level
Haulageways - 0.3 x working level
Total Mine Exposure index - 0.6 x working level

ENFORCEMENT

Due to the concentrations of radon-daughters, the following orders were issued:

Order No. 1

Date: August 24, 1976

Time: 2:00 p.m.

TO: F. A. Alkhafi, Mine Superintendent, Section 17 Mine, Kerr-McGee Nuclear Corporation, Ambrosia Lake, New Mexico.

"Pursuant to New Mexico State Mine Laws, Section 63-4-5(c) and 63-4-12, and regulations adopted by this office and under the authority conferred by this office, hereby - you are hereby ordered to Cease all operations of production or productive usage of 6403 stope slushers for the reason of radon-daughter concentrations above 1.0 working levels and such order will remain in effect until radon-daughter concentrations are reduced below 1.0 working level and abated by this department. Failure to comply with this order will result in prosecution for its violation."

The above, Order No. 1, was abated August 26, 1976, as concentrations of radon-daughters were reduced below 1.0 working level. Abated August 26, 1976.

Order No. 2

Date: August 24, 1976

Time 2:00 p.m.

TO: F. A. Alkhafi, Mine Superintendent, Section 17 Mine, Kerr-McGee Nuclear Corporation, Ambrosia Lake, New Mexico.

"Pursuant to New Mexico State Mine Laws, Section 63-4-5(c) and 63-4-12, and regulations adopted by this office and under the authority conferred by this office, hereby - you are hereby ordered to Cease all usage of 6000 lunchroom for the reason of radon-daughter concentrations above 1.0 working levels and such order will remain in effect until radon-daughter concentrations are reduced below 1.0 working level and abated by this department. Failure to comply with this order will result in prosecution for its violation."

The above, Order No. 2, was abated August 26, 1976, as concentrations of radon-daughters were reduced below 1.0 working level.

Order No. 3

Date: August 26, 1976

Time: 12:00 noon

TO: F. A. Alkhafi, Mine Superintendent, Section 17 Mine, Kerr-McGee Nuclear Corporation, Ambrosia Lake, New Mexico.

"Pursuant to New Mexico State Mine Laws, Section 63-4-5(c) and 63-4-12, and regulations adopted by this office and under the authority conferred by this office, thereby - you are hereby ordered to Cease all operations of production or productive usage of 9001 stope exhaust area for the reason of radon-daughter concentrations above 1.0 working levels and such order will remain in effect until radon-daughter concentrations are reduced below 1.0 working level and abated by this department. Failure to comply with this order will result in prosecution for its violation."

The above, Order No. 3, was in effect at the conclusion of the inspection.

Order No. 4

Date: August 25, 1976

Time: 12:00 noon

TO: F. A. Alkhafi, Mine Superintendent, Section 17 Mine, Kerr-McGee Nuclear Corporation, Ambrosia Lake, New Mexico.

"Pursuant to New Mexico State Mine Laws, Section 63-4-5(c) and 63-4-12, and regulations adopted by this office and under the authority conferred by this office, thereby - you are hereby ordered to Cease all operations of production or productive usage of 5802 stope slusher positions for the reason of radon-daughter concentrations above 1.0 working levels and such order will remain in effect until radon-daughter concentrations are reduced below 1.0 working level and abated by this department. Failure to comply with this order will result in prosecution for its violation."

The above Order No. 4 was in effect at the conclusion of the inspection.

Order No. 5

Date: August 25, 1976

Time: 12:00 noon

TO: F. A. Alkhafi, Mine Superintendent, Section 17 Mine, Kerr-McGee Nuclear Corporation, Ambrosia Lake, New Mexico.

"Pursuant to New Mexico State Mine Laws, Section 63-4-5(c) and 63-4-12, and regulations adopted by this office and under the authority conferred by this office, thereby - you are hereby ordered to Cease all operations of production or productive usage of 9203 slusher position for the reason of radon-daughter concentrations above 1.0 working levels and such order will remain in effect until radon-daughter concentrations are reduced below 1.0 working level and abated by this department. Failure to comply with this order will result in prosecution for its violation."

The above order No. 5 was in effect at the conclusion of the inspection.

NOTICES ISSUED AUGUST 26, 1976

Notice No. 1, Section 63-28-6, NMSA: Additional support shall be installed at the 8702 grizzly intersection. (57.3-2M) Abated 8-26-76.

Notice No. 2, Section 63-28-6, NMSA: Additional support shall be installed in the 9202 slusher lane. (57.3-2M) Abated 8-26-76.

Notice No. 3, Section 63-28-6, NMSA: Additional support shall be installed in the 5802 No. 2 slusher installation intersection. (57.3-2M) Abated 8-26-76.

ACKNOWLEDGMENT

The courtesy and cooperation of all employees are hereby gratefully acknowledged.

Inspected and Reported by:
Howard Robison
Dust and Mine Gas Engineer
Deputy Inspector of Mines

geb

Approved:



JOE D. LONGACRE, SR.
State Inspector of Mines