

SAFETY INSPECTION

DMB

1. LICENSEE <i>Kerr - McGee Corporation Kerr - McGee Center, 606 Oklahoma City, Oklahoma 73125</i>		2. REGIONAL OFFICE U.S. Nuclear Regulatory Commission RIV 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011	
3. DOCKET NUMBER(S) <i>030-08401 040-08006</i>	4. LICENSE NUMBER(S) <i>35-12636-06 SUB-986</i>	5. DATE OF INSPECTION <i>12/19/89</i>	

Licensee:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission's (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews, with personnel, and observations by the inspector. The findings as a result of this inspection are as follows:

1. Within the scope of this inspection, no violations were observed.

2. The inspector also verified the steps you have taken to correct the violations identified during the last inspection. We have no further questions on those actions at this time.

3. During this inspection certain of your activities, as checked below, were in violation of NRC requirements.
THIS IS A NOTICE OF VIOLATION which is required to be posted in accordance with 10 CFR 19.11.

A. _____ was not properly posted to indicate the presence of a _____ 10 CFR 20.203(b), (c), (d), (e) or 34.42.

B. Containers located in _____ were not properly labeled to indicate the presence of radioactive material. 10 CFR 20.203(f)(1), or (f)(2).

C. _____ of sealed sources were not performed at the proper frequencies. 10 CFR _____ License Condition Number _____

D. Records of _____ were not properly maintained. 10 CFR _____ or License Condition Number _____

E. Documents were not properly posted or otherwise made available. 10 CFR 19.11.

F. Reports or notifications of _____ were not made in accordance with 10 CFR _____ or License Condition Number _____

H. _____

I. _____

J. _____

K. _____

c/20

I hereby state that within 30 days the actions described by me to the Inspector will be taken to correct the violations identified in the items checked above. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201. No further response will be submitted unless required by the NRC.

9001260172 891219 REG4 LIC30 35-12636-06 FDC	<i>Selvan Rajendran</i> IE-07011 12/19/89
SIGNATURE - LICENSEE	SIGNATURE - NRC INSPECTOR
DATE	DATE



REGION IV

Industrial-Academic

NUCLEAR MATERIALS SAFETY
DRAFT INSPECTION REPORT

Licensee: Kerr-McGee Corporation
Kerr-McGee Center
123 Robert S. Kerr Avenue
Oklahoma City, Oklahoma 73125

Report: 85-01
License: SUB-986, 35-12636-06
Docket: 40-08006 030-08401
Category/Priority: E-3 E-5

Inspection At: 330 N.W. 150 Street, OKC, OK

Inspection Dates: 12/19/89

Licensee Contact: John Carver RSO

Telephone No: (405) 270-2623

Previous Inspection Dates: 6/26/87

Previous Findings: Clear 591

Table with 3 columns: Type Inspection (Routine, Special, Unannounced, Announced, Initial), Inspection Procedures (30703, 30800, 87100, 83822, 86740), and other procedures (92702, 92706).

Persons Contacted

John Carver RSO
Ken Richards President Tech Division

Inspection Findings

- 591 - No Violations
591 - Violations
Regional Office Letter
Appendix A - Violations (attached)
Appendix B - Action on previous violations (attached)
Appendix C - Inspector comments/supplemental information (attached)

Direct Inspection Effort: 4 Hrs.

Next Inspection Date: 12/92 [X] Normal [] Advanced [] Extended

Inspector: Selvan Rajendran 1/18/90

Approved: OL Cain 1/18/90

INSPECTION CRITERIA	Yes	N/A	Vio.
---------------------	-----	-----	------

1. Entrance Briefing

- | | | | |
|------------------------------------|-----|-----|-----|
| a. Proper licensee address? [LC 2] | (X) | () | () |
| b. Proper use location? [LC 10] | (X) | () | () |
| c. Proper users? [LC 12] | (X) | () | () |
| d. Organization: | | | |

Notes/Remarks: Ken Richards - President technical Division
 Scott Munson Corporate RSD
 Frank McPherson CEO
 Tom Cawthon V.P. Research Development
 John Carver RSD

The license SUB-986 NO activities at all, except for the test pits at Ken-McBee test center. ^{142 kg, 430g in the test pits} Rest of the material had been transferred to other facilities such as Sequoyah field, & Commeron facility.

2. Posting, Labeling, Facilities, and Security of Materials

- | | | | |
|---|-----|-----|-----|
| a. Posting of regs, license, Procedures, and NRC-3? [9.11, 30.7(e), 40.7(e), 70.7(e)] | (X) | () | () |
| b. Areas properly posted? [20.203] | (X) | () | () |
| c. Containers properly labeled CRM? [20.203(f)] | (X) | () | () |
| d. Materials secured? [20.207, LC _____] | (X) | () | () |
| e. Facilities as required? [LC _____] | (X) | () | () |

Notes/Remarks:

The license 35-12636-06 ≈ 98% work is sealed sources, rest of the 2% are µCi levels of unsealed sources. Most of the sealed sources are in the form of fixed gauges Kayray, Texas Nuclear. They are hoping that Commeron facility will be decontaminated by end of 1990. At the current time there are ≈ 40 persons working there.

3. Independent Measurements

- | | | | |
|---|-----|-----|-----|
| a. Unrestricted areas within limits? [20.105] | (X) | () | () |
| b. Restricted areas within limits? [20.203] | (X) | () | () |
| c. Radiation Measurements: | | | |

Notes/Remarks: measurements were made of the fixed gauges - 200 mCi Cs-137 Texas Nuclear gauge at 1m the reading was .2 mR/hr. The gauges ~~are~~ easily accessible.

INSPECTION CRITERIA	Yes	N/A	Vio.
4. Personnel Monitoring Control			
a. Used as required? [20.202, LC ____]	(x)	()	()
(1) Type: (x) Film () TLD () Chamber () _____			
(2) Feq: (x) M () Q () _____			
(3) Processor: () licensee () vendor <u>Kandauer</u>			
b. Forms NRC-5 maintained? (20.401)	(x)	()	()
c. Forms NRC-4 maintained? [20.102(b)]	()	(x)	()
d. Determination of prior dose? [20.102(a)]	(/)	(x)	()
e. All exposures within limits? [20.101]	(x)	()	()
f. Exposures to minors limited? [20.104]	()	(x)	()
g. Exposures: Typical WB <u>m</u> Max WB <u>20</u>			

Notes/Remarks: *~20 persons badged Internal investigation is set at 40 One month an individual had 50, internal investigation was performed.*

5. Facility and/or Field Site Surveys			
a. Facility Contamination surveys?	(x)	()	()
b. Facility exposure rate surveys?	(x)	()	()
c. Other	()	()	()

d. Records maintained? [20.401, LC ____]	(x)	()	()

Notes/Remarks: *Bi monthly surveys using Eberline E-120 S# 448
Ludlum 12 S# 46883
All records OK.*

INSPECTION CRITERIA	Yes	N/A	Vio.
6. Receipt, Use, Inventory, and Transfer Material			
a. Written procedures for pickup, receiving, opening of packages? [20.205]	(X)	()	()
b. Proper receipt records? [30.51(a), 40.61(a), 70.51(b)]	(X)	()	()
c. Package receipt surveys? [20.205, LC ____]	(X)	()	()
d. Records of surveys maintained? [20.401(b)]	(X)	()	()
e. Possession of only authorized material? [LC 6-8]	(X)	()	()
f. Devices or use of materials as authorized? [LC 9]	(X)	()	()
g. Transfers to authorized recipients? [30.41, 40.51, 70.42]	(X)	()	()
h. Records of transfers maintained? [30.51(a), 40.61(a), 70.51(b)]	(X)	()	()
i. Physical inventories performed as required? [LC ____]	(X)	()	()
j. Records of inventories properly maintained?	(X)	()	()
k. Types of materials used:			
<i>Sealed Sources Cs-137, Pu-238, Cd-109, Am-241, Cs-137 fixed gauge, H-3 gas chromatograph, Ac-227 1mci, C-14 15mci, H-3 10mci, Na-22 1mci, Pb 210 20mci, Se 753mci, Sr-90 1mci, S 35 5mci, U-235 10mci</i>			

Notes/Remarks:

7. Waste Disposal

a. Hold for decay/survey/release?	()	()	()
b. Release to sanitary sewer?	(X)	()	()
c. Other	(X)	()	()
<hr/>			
d. Records of disposals? [30.51(a), 40.61(a), 70.51(b)]	(X)	()	()
e. Records of disposal surveys? [20.401]	(X)	()	()
f. Appropriate disposal procedures [20.302]	(X)	()	()

Notes/Remarks: ~~none~~ Some of the waste are taken to the Cimarron facility for disposal. Sealed sources returned to manufacturer. The sanitary sewer limits were within regulatory limits.

INSPECTION CRITERIA	Yes	N/A	Vio.
---------------------	-----	-----	------

8. Leak Tests [LC]

- | | | | |
|---|-----|-----|-----|
| a. Performed at proper frequencies? | (X) | () | () |
| b. Records maintained? | (X) | () | () |
| c. Proper detection limits and units? | (X) | () | () |
| d. Performed by authorized individuals? | (X) | () | () |
| e. Leakage properly reported? | () | (X) | () |

Notes/Remarks: *leak tests done by Gulf Nuclear.*

9. Survey Instrument Calibration (LC) ()

Mfg	Model #	Serial #	Calib. Dates
<i>Eberline</i>	<i>E-120</i>	<i>448</i>	<i>12/87, 7/88, 1/89, 7/89</i>
<i>Ludlum</i>	<i>12 Probe 43-5</i>	<i>46883</i>	<i>12/87, 7/88, 1/89, 7/89</i>
<i>Ludlum</i>	<i>12</i>	<i>3672</i>	<i>12/87, 7/88, 1/89, 7/89</i>

- | | | |
|--|-----|-----|
| a. Equipment as required by application? | (X) | () |
| b. Proper calib. frequency? <u>6 mo</u> | (X) | () |
| c. Proper calib. records? | (X) | () |
| (1) two-points per scale? | () | () |
| (2) Performer: () licensee () vendor | () | () |

Notes/Remarks: *Calibration at Cameron facility*

INSPECTION CRITERIA	Yes	N/A	Vio.
10. <u>Training and Procedures</u>			
a. Appropriate worker training? [19.12, LC ____]	(X)	()	()

b. Appropriate radiation safety procedures?	(X)	()	()
c. Appropriate emergency procedures?	(X)	()	()
d. Personnel understand safety and emergency procedures?	(X)	()	()

Notes/Remarks: 8. 29 & 8-13 for all the employees when hired
Biannual training by Corporate RSO for everyone

11. Notifications and Reports

a. Reports of thefts or losses? [20.402]	()	(X)	()
b. Notifications and reports of incidents? [20.403, .405]	()	(X)	()
c. Notifications and reports to individuals? [20.409]	()	(X)	()
d. Reciprocity notifications? [150.20]	()	(X)	()
e. Reports concerning SNM-Form-742? [70.53]	()	(X)	()
f. Well Logging-Reports of lost sources down-hole? (30.56(c), LC ____)	()	(X)	()
g. Other: _____	()	(X)	()

Notes/Remarks:

12. Special Requirements

() () ()

Notes/Remarks:

