

SAFETY INSPECTION

1. LICENSEE Kerr-McGee Corporation Technical Center 3301 N.W. 150th St. Oklahoma City, OK		2. REGIONAL OFFICE U. S. Nuclear Regulatory Commission Region IV 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76012	
3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S) SUB-936 040-08006	5. DATE OF INSPECTION November 16, 1982	

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. _____

6/16

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.

SIGNATURE - LICENSEE

DATE

SIGNATURE - NRC INSPECTOR

DATE

Frank W. Shippen

11/16/82

REGION IV

TECHNICAL INSPECTION BRANCH
DRAFT INSPECTION REPORT

Licensee: Kerr-McGee Corp
3301 W.W. 150 Street
OKLAHOMA CITY, OK

Report: 040-08006/82-01

License: SUB 986

Category/Priority: E/IV

Licensee Contact: W.J. Robertson

Telephone No.: _____

Inspection At: 3301 W.W. 150 Street, OK City, OK

Previous Inspection Dates: Feb. 26, 1979

Findings: 2 deficiencies

Current Inspection Dates: November 16, 1982

Type Inspection: Routine, UNANNOUNCED

Inspection Findings

- No violations, clear 591 issued
- Violations, Appendix A or equivalent attached
- Violations, 591 issued
- Regional Office Letter
- Action on Previous inspection findings, Appendix B attached

Recommendations

- Change category to: _____
- Change Priority to: _____
- Change next inspection Date to: _____
- Inspectors comments/supplemental information, Appendix C

Persons Contacted

* W.J. Robertson, R.S.O. _____

* John Hale, Mgr. of Tech Center. _____

* Calvin Long, Adm Mgr _____

* Exit briefing

Inspector: T. M. Simpson

Approved: _____

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
Lic Cond <u>10</u> <i>part of application</i>	1. <u>Organization</u> a. Management — b. Radiation protection — W.J. Robertson is RSO W.L. Utnege .			
Lic Cond _____	2. <u>Licensee Internal Audits</u> a. Required by LC or application b. Frequency of audits _____ Audit dates covering inspection period _____ c. Records of audits required d. Records of audits available e. Management involved in audits f. Management corrective actions g. Type of Audit { } Announced { } Unannounced	{ }	{ }	{ }

*W.L. Utnege - Dir. of Tech Div
John D. Hale - Mgr. of Tech. Cent
W.J. Robertson - RSO*

Notes/Remarks:

*None required by license. G.J. Sinke perform periodic audits of
of Tech. Center Radiation safety.*

Lic Cond <u>11</u>	3. <u>Training, Retraining and Instruction to Employees</u> a. Required by LC or application b. Frequency of training _____ retraining _____ Training dates covering inspection period _____ Retraining dates covering inspection period _____ c. Records of training required d. Records of retraining required	{ }	{ }	{ }
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*Radiation Safety Booklet still distributed to employee. Employees sign
exam stating they have read & understood the information in booklet.*

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
	e. Test or examination given	{ }	{ }	{ }
	f. Test or examinations available	{ }	{ }	{ }
10 CFR 19.12	g. Instruction to workers	{ <input checked="" type="checkbox"/> }	{ }	{ }
Reg. G. 8.13	h. Prenatal radiation exposure instruction to female employees	{ <input checked="" type="checkbox"/> }	{ }	{ }

Notes/Remarks:
Female employees sign statements to the effect that they read and understand Reg. Guide 8.3

4. Radiation Protection Procedures

Lic Cond _____	a. Operating & emergency procedures available	{ <input checked="" type="checkbox"/> }	{ }	{ }
<i>Application May 17, 1979</i>	b. Personnel understand O & E procedures	{ <input checked="" type="checkbox"/> }	{ }	{ }
	<i>as required by license application</i>			

Notes/Remarks:

5. Instrumentation

a. Types of radiation survey instruments available

Instrument Mfg.	Model No.	Serial No.	Calibration Date	Range
Eberline	E120 BT	448/600566	9/27/82, 8/27/81,	0-500 μ R/hr
Eberline	PAC 36 α	5-46	6/24/82, 2/20/81, 8/12/80	0-100 K c/m

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
	b. Radiation survey instruments adequate for program	{X}	{ }	
	c. Calibration procedure in accordance with license application	{X}	{ }	
Notes/Remarks:	d. Calibration vendor <u>Eberline</u> <u>calibrated annually</u>			

6. Materials & Posting

Lic Cond B+8

<u>U (natural)</u>	<u>Any</u>	<u>250 Kg</u>	<u>Inventory as of 1982</u>
<u>Th (natural)</u>	<u>Any</u>	<u>150 Kg.</u>	<u>8.8 Kgs</u>

Note - stored in place not in use since 8/25

b. Materials on hand

Byproduct Material	Chem/Phy Form	Amount	Use
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c. Use and quantities in accordance with license. {X} { }

10 CFR 20.207

d. Radioactive material secured to prevent unauthorized removal from:

- i. Restricted area { } { }
- ii. Unrestricted area { } { }

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
	e. Posting and labeling			
10 CFR 20.203(e)(f)	Caution Radioactive Material	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 CFR 20.203(b)	Caution Radiation Area	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10 CFR 20.203(c)	Caution High Radiation Area	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Notes/Remarks:

7. Facilities

Lic Cond <i>application</i> <i>5/17/79</i>	a. Facilities as required by license	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Changes in facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Notes/Remarks:

8. Receipt and Transfer of Material

10 CFR 20.205(b)(c) 10 CFR 71.51	a. Procedures for picking up, receiving and opening packages available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Incoming shipments monitored	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 CFR 20.401(b)	c. Records of monitoring maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 CFR 30.41	d. Transfer of ^{source} byproduct material <i>None transferred</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10 CFR 30.51	e. Records of receipt, transfer, storage, surveys and monitoring. <i>None received since last insp.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
10 CFR 71.5 49 CFR 170 to 189	f. Labeling and packaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g. Reports to Commission required by LC, notices or regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	h. Reports submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes/Remarks:

9. Personnel Radiation Protection-Exterior

as per license application item A - sect (k)

10 CFR 20.101 20.102 20.202	a. Personnel dosimetry available <input checked="" type="checkbox"/> film <input checked="" type="checkbox"/> tld <input type="checkbox"/> other <input type="checkbox"/> not required <i>Badges Rings</i>			
	b. Film or tld badge supplier <u>Landauer</u>			
	c. Exchange frequency <input checked="" type="checkbox"/> monthly <input type="checkbox"/> quarterly <input type="checkbox"/> other			
	d. Dosimetry data reviewed by <u>Robertson</u>			
	e. Dosimetry reports reviewed for dates covering <u>1979</u> to <u>9/82</u>			
10 CFR 20.102(b)	f. NRC forms or equivalent available & complete NRC 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 CFR 20.401(a)	NRC 5 Equivalent <u>Landauer</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	g. Number of personnel monitored <u>10</u>			
10 CFR 20.104	h. Number of minors monitored <u>0</u>			
	i. Maximum whole body exposure <u>40</u> mr			
	j. Maximum extremity exposure <u>190</u> mr			

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
10 CFR 20.1	k. Radiation surveys of unrestricted areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 CFR 20.105	restricted areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 CFR 20.401	l. Records of surveys of unrestricted areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	restricted areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>B, monthly</i> m. Records of surveys reviewed by management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes/Remarks:	<p>R.S.O. Corporate R.S.O. visits once a year. 5/15/79 to 10/27/82 Surveys < 0.1 mR/hr.</p>			

10. Personnel Radiation Protection-Internal

10 CFR 20.103	a. Potential exist for exposure to airborne concentrations of radioactive material	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>When hoods are used for separations</i>			
10 CFR 20.203	b. Airborne radioactivity area posted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>when necessary -</i>			
	c. Monitoring and/or control program exist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Monitoring and/or control program adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Records of monitoring maintained & adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f. Records of monitoring reviewed by <u>Robertson</u>			
	g. Respiratory protection required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	h. Respiratory portection program adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	i. Bioassy program required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	j. Bioassy program adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	k. Smear and/or wipe survey program required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	l. Smear and/or wipe survey program adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	m. Smear and/or wipe survey records avaiable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes/Remarks: *Need for air samples not needed since 1977*

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
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11. Leak Test

Lic Cond _____

- a. Leak test required { } { } {X}
- b. Leak test frequency { } { } { } { } { }
 - { } 6 month { } 1 yr { } 2 yr { } 3 yr { } other
- c. Leak test supplier/vendor _____
- d. Leak test records audit

Source Mfg. Model Serial No. Quantity Isotope Leak test

Notes/Remarks:

12. Radioactive Effluent Control and Waste Disposal

- 10 CFR 20.106
20.303 a. Byproduct material released to { } Atmosphere
{ } Sewer
{X} N/A
- 10 CFR 20.401 b. Records of releases maintained { } { }
- 10 CFR 20.301
20.303
20.305-306 c. Solid waste disposal { } { } { }
- 10 CFR 20.401 d. Procedures and records for waste disposal available { } { } { }

Notes/Remarks:

No releases to sewer or atmosphere of source material.

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA	INSPECTION ITEMS	Yes	No	N/A
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15. Posting of Notices

10 CFR 19.11(a)	a. Parts 10 CFR 19 & 20, License & associated documents, procedures & notice of violation posted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10 CFR 19.11(c)	b. NRC 3 posted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Notes/Remarks: *Posted in the corridor of the lab. (main corridor) Reception Area.*

16. Environmental Monitoring Program

a. Environmental program required	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Environmental monitoring records maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Notes/Remarks:

17. Confirmatory Measurements

a. Independent measurements made by Inspector

	Mfg.	Serial No.	mR/h
NRC Instrument	<i>Detex</i>	<i>8143</i>	<i>1.8 3.5</i>
Licensee Instrument	<i>Eberling</i>	<i>448</i>	<i>1.8 3.6</i>

b. Source of comparison

Notes/Remarks:

18. Other License Conditions

Lic Cond _____	<input type="checkbox"/>	<input type="checkbox"/>
Lic Cond _____	<input type="checkbox"/>	<input type="checkbox"/>
Lic Cond _____	<input type="checkbox"/>	<input type="checkbox"/>

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

CRITERIA

INSPECTION ITEMS

19. Independent Inspection Effort

- a. Transportation
- b. Handling of RAM
- c. Storage of RAM
- d. Waste Disposal
- e. Receipt of RAM
- f. Records: (specify)
- g. Inventory of RAM
- h. Dosimetry
- i. NRC Rules and Regulations
- j. NRC Regulatory Guides
- k. Application review of program requirements
- l. Personnel Interviews
- m. Calibration procedures & protocol
- n. Leak test
- o. Posting requirements
- p. Security of materials
- q. Incident follow-up
- r. Special NRC assigned projects

Notes/Remarks:

APPENDIX C - SUPPLEMENTARY INFO

Docket 046-08006

Licensee: KERR-MGee

License no: SUB 986

- Uncorrected/repeated noncompliance
- Unusual occurrence, conditions, etc
- Basis for change of Category or Priority

- Unresolved items
- Inspector's comments

This operation is not too active at this time. The R&D effort is slow.

*Directions to get to the Tech Center in Oklahoma City
North on May Ave to 150th street; turn West
for about 1.5 miles. Center is on the right (North side)
of the Road.*