

SAFETY INSPECTION

1. LICENSEE KERR-McGEE CORPORATION KERR-McGEE CENTER - 606 OKLAHOMA CITY OK 73125		2. REGIONAL OFFICE REGION IV U S NUCLEAR REGULATORY COMMISSION 611 RYAN PLAZA DRIVE SUITE 400 ARLINGTON TX 76011-8064	
3. DOCKET NUMBER(S) 040-08006 030-08401	4. LICENSE NUMBER(S) 195-01 SUB 986 35-12636-06	5. DATE OF INSPECTION 11/27/95	

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 (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 described below or attached, were in violation of NRC requirements. This form 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. _____ of sealed sources were not performed at the proper frequencies. 10 CFR _____ or License Condition Number _____.
 - C. Records of _____ were not properly maintained. 10 CFR _____ or License Condition Number _____.
 - D. Documents were not properly posted or otherwise made available. 10 CFR 19.11.
 - E. Reports or notification of _____ were not made in accordance with 10 CFR _____ or License Condition Number _____.
 - F. _____

9512130050 951127
PDR ADDCK 03008401
C PDR

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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 1300006	DATE	SIGNATURE - NRC INSPECTOR B. G. Leonard	DATE 11/27/95 11/27/95
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1. INSPECTION HISTORY

() N/A - Initial inspection

- A. Violations were identified during any of the last two inspections or two years, whichever is longer Y () N
- B. Response letter(s) or 591(s) dated _____
- C. Open-violations from previous inspections:

Requirement	Violation		Corrective Action Taken (Y/N)	Status Open/Closed
	PERSON	OTHER THAN		
LC 12	SPECIFIED	DESIGNATED AS RSO	/	C

- D. Explain any previous violation(s) not corrected or repeated N/A

2. ORGANIZATION AND SCOPE OF PROGRAM

- A. Organizational Structure
 - + J.B. WORTHINGTON - V.P. R & D
 - ↓
 - + E.J. JOHNSON SAFETY DIRECTOR/RSD

+ Individuals contacted during inspection
 * Individuals present at exit meeting

- 1. Meets license requirements [L/C] Y () N
- 2. Multiple authorized locations of use and/or laboratories Y () N
 If yes, may use ATTACHMENT A as a guide for location(s) or lab(s) inspected and note lab numbers where violations are found. () N/A
- 3. Briefly describe scope of activities, including types and quantities of use involving byproduct material, frequency of use, staff size, etc.

*Mimimal activities: Ni 63 sealed sources in G.C.'s
 2 sealed sources Ni 63; Check sources held
 AM 241 in Storage (unit mCi)
 FE-55 Gauges Transferred
 Cm 244*

Program Continuing to Downsize

SUD-9.86
 2 Test Pits with
 ≈ 146 Kg of Uranium
 (natural)

- B. Radiation Safety Committee required [L/C] () Y N
- 1. RSC fulfills license requirements [L/C] N/A () Y () N
- 2. Records maintained [L/C] N/A () Y () N

4. INTERNAL AUDITS, REVIEWS OR INSPECTIONS

- A. Audits are required [L/C] Y N
- B. Audits or inspections are conducted Y N
- (1) Audits conducted by Corporate office & RSD *Received findings*
- (2) Frequency Annually
- C. Content and implementation of the radiation protection program reviewed annually by the licensee [20.1101(c)] Y N
- D. Records maintained [20.2102] Y N

5. FACILITIES

- A. Facilities as described in license application [L/C] Y N
- B. Describe any Self-contained dry-source-storage irradiators [Part 36] and/or survey instrument calibrators (model, radionuclide, activity, use, etc.) N/A
- instrument sent calibrated by Ken Meber - Cimmaron*

manufacturers

1. Maintenance of safety-related components performed by authorized persons [L/C] Y N
2. Access to keys and/or material controlled [20.1801, 1802, L/C] *Combo safe* Y N
3. Access to high/very high radiation areas controlled [20.1601, 1602, L/C] *N/A* Y N
4. Adequate protection of shield integrity, fire protection [L/C] Y N

Remarks: *Audits conducted 1/94 & 6/95*

6. MATERIALS

- Records reviewed 7/93 to present*
- A. Isotope, chemical form, quantity and use as authorized [L/C] Y N
- B. Licensed materials secured to prevent unauthorized removal or access [20.1801, 1802] Y N
- C. Leak tests and Inventories [L/C]
1. Performed as required N/A Y N
2. Adequate analysis methodology and sensitivity N/A Y N
3. Records maintained [L/C] Y N

Remarks: *A member performs leak tests since 93 every 6 months*

B. Effluents

() N/A

1. Release into sanitary sewer [20.2003] () N/A Y () N

a. Material is readily soluble or readily dispersible [20.2003(a)(1)] Y () N

b. Monthly average release concentrations do not exceed Appendix B values [20.2003] Y () N

c. No more than 5 Ci of H-3, 1 Ci of C-14 and 1 Ci of all other radionuclides combined released in a year [20.2003] Y () N

d. Procedures to ensure representative sampling and analysis properly implemented [20.1501(a)(2), L/C] Y () N

2. Release to septic tanks [20.2003] N/A () Y () N

a. Within unrestricted limits [App B, Table 2] () Y () N

3. Waste incinerated N/A () Y () N

a. License authorizes [20.2004(a)(3)] () Y () N

b. Licensee directly monitors exhaust () Y () N

c. Airborne releases evaluated and controlled [20.1501, 1701] () Y () N

4. Control of effluents and ashes [20.1201, 1301, 1501, 2001, L/C] {See also IP 87102, FG 8.37} Y () N

a. Compliance with air emissions requirements in Part 20:

Licensee has demonstrated compliance with air emission requirements in 10 CFR Part 20 Y () N

Basis for compliance determination (circle one or more; provide basis below)

(1) Measured concentrations of radionuclides in air effluents are below Appendix B, Table 2 concentrations (and external dose < 50 mrem/yr)

(2) Bounding calculations show that air effluents could not exceed Appendix B, Table 2 concentrations (and external dose < 50 mrem/yr)

(3) Dose modeling shows that dose equivalent to the individual likely to receive the highest dose does not exceed 10 mrem/yr

(4) Licensee does not possess sufficient radioactive material to exceed Part 20 requirements

Basis for Determination: No possession of gases or volatile fluids

D. Records of surveys and material accountability are maintained [20.2103, 2108]

Y () N

Remarks:

9. RECEIPT AND TRANSFER OF RADIOACTIVE MATERIAL

A. Describe how packages are received and by whom:

N/A

No receipts since last insp

B. Written package opening procedures established and followed [20.1906(e)] *N/A* () Y () N

C. All incoming packages with DOT labels wiped, unless exempted (gases and special form) [20.1906(b)(1)] *N/A* () Y () N

D. Incoming packages surveyed per [20.1906(b)(2)] *N/A* () Y () N

E. Monitoring in (C) and (D) above, performed within time specified [20.1906(c)] *N/A* () Y () N

F. Transfer(s) between licensees performed per [30.41] Y () N

G. All sources surveyed before shipment and transfer [20.1501(a), 49 CFR 173.475(i), L/C] Y () N

H. Records of surveys and receipt/transfer maintained [20.2103(a), 30.51] Y () N

I. Transfers within licensee's authorized users or locations performed as required [L/C] () N/A Y () N

J. Arrangements made for packages containing quantities of radioactive material in excess of Type A quantity [20.1906(a)] Y () N

K. Package receipt/distribution activities evaluated for compliance with 20.1301 [20.1302] () N/A Y () N

*Transferred
Gauges to
W.M. KELLOGG &
Field
Sources to
Manufacturers*

Remarks:

10. TRANSPORTATION (10 CFR 71.5(a) and 49 CFR 170-189)

() N/A

A. Licensee shipments are:

- delivered to common carriers
- () transported in licensee's own private vehicle
- () both
- () no shipments since last inspection

Tri State Motor Transit

- C. External Dosimetry () N/A
1. Licensee monitors workers [20.1502(a), L/C] Y () N
 2. External exposures account for contributions from airborne activity [20.1203] N/A () Y () N
 3. Supplier LANDANGER Frequency monthly Y () N
 4. Supplier is NMLAP-approved [20.1501(c)] Y () N
 5. Dosimeters exchanged at required frequency [L/C] Y () N
- D. Internal Dosimetry N/A
1. Licensee monitors workers [20.1502(b), L/C] () Y () N
 2. Briefly describe licensee's program for monitoring and controlling internal exposures [20.1701, 1702, L/C]:
 3. Air sampling performed () Y () N
 4. Monitoring/controlling program implemented () Y () N
 5. Respiratory protection equipment [20.1703, L/C] () Y () N
- E. Reports () N/A
1. Reviewed by RSD Frequency monthly
 2. Inspector reviewed personnel monitoring records for period 1/93 to 10/31/95
 3. Prior dose determined for individuals likely to receive doses [20.2104] 330/year Y () N
 4. Maximum exposures ~~TBE~~ B Other _____
 5. Maximum ODEs _____ Organs _____
 6. Maximum CEDE _____
 7. Licensee sums internal and external [20.1202] N/A () Y () N
 8. TEDEs and TODEs within limits [20.1201] () Y () N
 9. NRC Forms or equivalent [20.2104(d), 2106(c)]
 - a. NRC-4 Y () N Complete: Y () N
 - b. NRC-5 Y () N Complete: Y () N
 10. Worker declared her pregnancy in writing during inspection period (review records) N/A () Y () N
 If yes, licensee in compliance with [20.1208] () Y () N
 and records maintained [20.2106(e)] () Y () N
No Declarations
- F. Who performed PSEs at this facility (number of people involved and doses received) [20.1206, 2104, 2105, 2204] N/A
- G. Records of exposures, surveys, monitoring, and evaluations maintained [20.2102, 2103, 2106, L/C] Y () N

Remarks:

16. BULLETINS AND INFORMATION NOTICES

- A. Bulletins, Information Notices, NMBS Newsletters, etc., received by the Licensee
- B. Licensee took appropriate action in response to Bulletins, Generic Letters, etc.

Y () N
 Y () N

Remarks:

No Action necessary

17. SPECIAL LICENSE CONDITIONS OR ISSUES

N/A

- A. Special license conditions or issues to be reviewed:
- B. Evaluation:

18. CONTINUATION OF REPORT ITEMS

N/A

19. VIOLATIONS, NCVs, AND OTHER ISSUES

N/A

Note: Briefly state (1) the requirement and (2) how and when the licensee violated the requirement. For non-cited violations, indicate why the violation was not cited.

20. DEBRIEF WITH LICENSING STAFF

Inspection findings discussed with licensing staff () N/A () Y N

Items discussed:

21. EPA REFERRAL FORM

EPA referral form for air effluents sent to appropriate EPA regional office per IP 87102

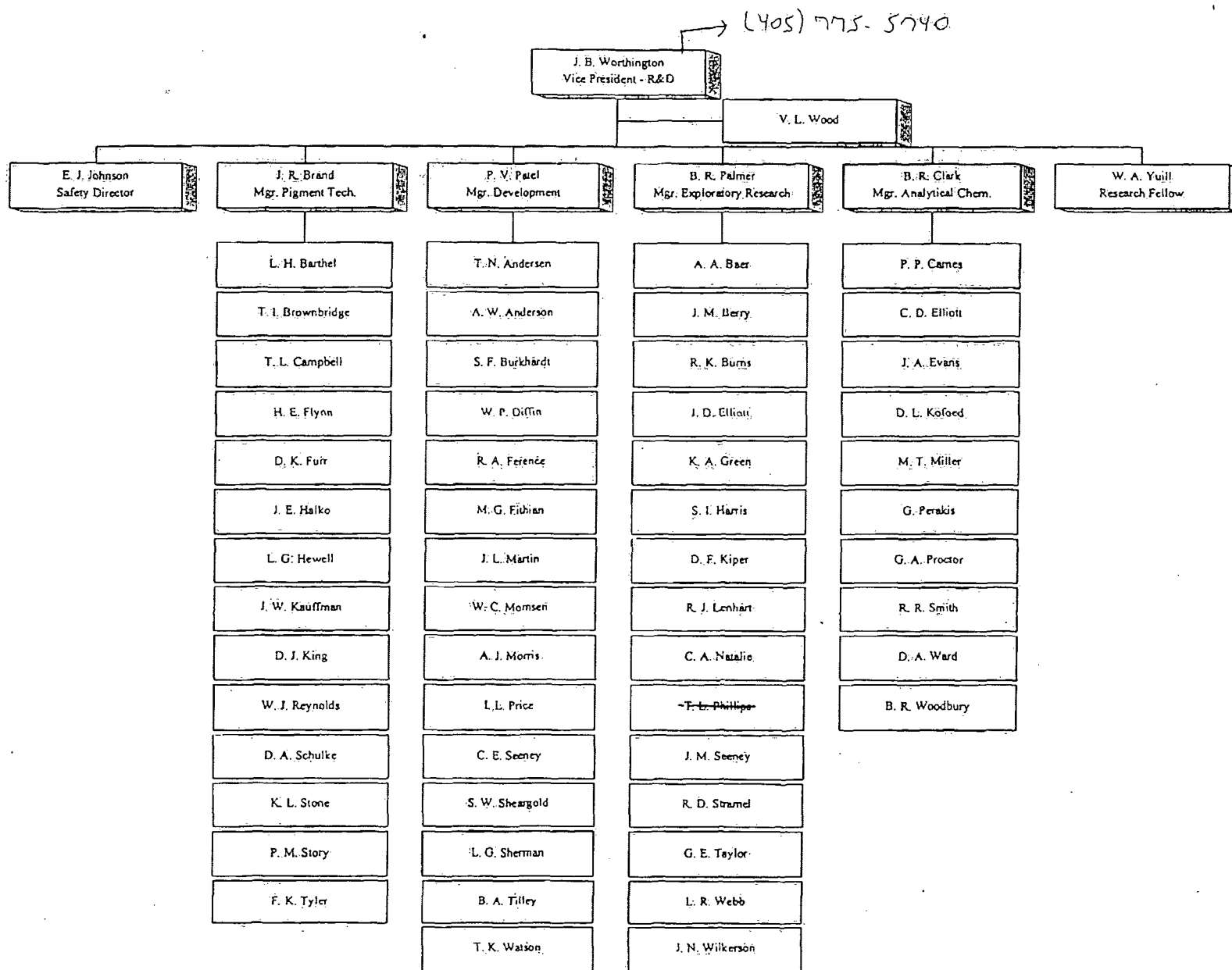
() Y N

no effluents (no spec on volatile liquids)

KERR-McGEE CHEMICAL CORPORATION

ORGANIZATION CHART

Technical Center Employees



June 12, 1995