



REGION IV

Industrial-Academ

NUCLEAR MATERIALS SAFETY
DRAFT INSPECTION REPORT

Licensee: KERR-McGee
KERR-McGee Technical Center
150 E May
Oklahoma City, Oklahoma

Report: 87-01
License: SUB-986
Docket: SUB-986
Category/Priority: E-3
Inspection Dates: June 26, 1987
Telephone No: 405-270-2623
Previous Findings: NO VIOLATIONS

Inspection At: 150 E May OK. City
Licensee Contact: John Carver
Previous Inspection Dates: 11/16/82

Table with 2 columns: Type Inspection and Inspection Procedures. Includes checkboxes for Routine, Special, Unannounced, Announced, Initial, and various procedure codes like 30703, 30800, 87100, 83822, 86740, 92702, 92706.

Persons Contacted

John Carver, RSO
Jim Coffman

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: 2 Hrs.

Next Inspection Date: 6/90 [X] Normal [] Advanced [] Extended

Inspector: Ron Peator

Approved: [Signature]

419

INSPECTION CRITERIA	Yes	N/A	Vio.
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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:

Source material use is stagnant
 { URANIUM test pits
 and
 research with URANIUM and Thorium } NOT used for ~ 10 years
 → except limited U²³⁵ "use" last year by ROBERTSON
 TRUNSON (CORPORATE)
 AUDIT includes source material license with byproduct
 CIPVER is now the RSO replacing ROBERTSON

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)] | () | () | () |
| b. Areas properly posted? [20.203] | () | () | () |
| c. Containers properly labeled CRM? [20.203(f)] | () | () | () |
| d. Materials secured? [20.207, LC] | () | () | () |
| e. Facilities as required? [LC] | () | () | () |

Notes/Remarks:

3. Independent Measurements

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

Notes/Remarks:

Thorium, Yellowcake storage
 < 6 mR/hr 18" from room - ROBERTSON
 is the only employee accessing room
 6 mR/hr * thorium storage container
 1 " " Yellowcake " "
 background @ URANIUM slabs/PITS for calibration

INSPECTION CRITERIA	Yes	N/A	Viol.
4. Personnel Monitoring Control			
a. Used as required? [20.202, LC _____]	(<input checked="" type="checkbox"/>)	()	()
(1) Type: (<input checked="" type="checkbox"/>) Film () TLD () Chamber () _____			
(2) Freq: (<input checked="" type="checkbox"/>) M () Q () _____			
(3) Processor: () licensee (<input checked="" type="checkbox"/>) vendor <u>Landuep</u>			
b. Forms NRC-5 maintained? (20.401)	(<input checked="" type="checkbox"/>)	()	()
c. Forms NRC-4 maintained? [20.102(b)]	()	(<input checked="" type="checkbox"/>)	()
d. Determination of prior dose? [20.102(a)]	()	(<input checked="" type="checkbox"/>)	()
e. All exposures within limits? [20.101]	(<input checked="" type="checkbox"/>)	()	()
f. Exposures to minors limited? [20.104]	()	(<input checked="" type="checkbox"/>)	()
g. Exposures: Typical WB <u>M</u> Max WB <u>- 30 mR</u> including by product use			

Notes/Remarks: air monitoring in fume hood last year for UFG work
bio-assay for UFG work - on two occasions

5. Facility and/or Field Site Surveys

a. Facility Contamination surveys?	()	()	()
b. Facility exposure rate surveys?	()	()	()
c. Other	()	()	()

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

Notes/Remarks: → bi-monthly survey included with byproduct material license

INSPECTION CRITERIA

Yes N/A Vii

6. Receipt, Use, Inventory, and Transfer Material

- a. Written procedures for pickup, receiving, opening of packages? [20.205] (✓) () ()
- b. Proper receipt records? [30.51(a), 40.61(a), 70.51(b)] (✓) () ()
- c. Package receipt surveys? [20.205, LC ____] (✓) () ()
- d. Records of surveys maintained? [20.401(b)] (✓) () ()
- e. Possession of only authorized material? [LC 6-8] (✓) () ()
- f. Devices or use of materials as authorized? [LC 9] (✓) () ()
- g. Transfers to authorized recipients? [30.41, 40.51, 70.42] () (✓) ()
- h. Records of transfers maintained? [30.51(a), 40.61(a), 70.51(b)] () (✓) ()
- i. Physical inventories performed as required? [LC ____] (✓) () ()
- j. Records of inventories properly maintained? (✓) () ()
- k. Types of materials used:

12/86 inventory } U NAT: 26.4 Rq U 308 Yellowcake
 U NAT: 146 Rq U 308 OPE - Test Pit
 Th NAT: 11 Rq Th misc. CMOS

Notes/Remarks:

Testing of UFG from GORE } → ^{NATURAL} UFG testing with Cookints
 (air sampling done 3 to 4 month period)
 in room and fume hood
 * EXCESS UFG shipped back to Savannah with ^{no high results} contaminants

7. Waste Disposal

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

Notes/Remarks:

INSPECTION CRITERIA	Yes	N/A	Vio.
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8. Leak Tests [LC]

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

Notes/Remarks:

9. Survey Instrument Calibration (LC ___) ()

Mfg	Model #	Serial #	Calib. Dates
Eberline	PAC	546	✓ 012 -

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

Notes/Remarks:

INSPECTION CRITERIA	Yes	N/A	Vio.
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10. Training and Procedures *See byproduct*
- a. Appropriate worker training? [19.12, LC ____]
Documentation that employees have received and
READ Reg Guide 8.24 (8.13 for female employees)
-
- b. Appropriate radiation safety procedures?
c. Appropriate emergency procedures?
d. Personnel understand safety and emergency procedures?

Notes/Remarks: *bi annual training for all badged personnel and offered to everyone. 6 hr course by Scott Munson - CORP. RS*

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

Notes/Remarks:

12. Special Requirements
- () () ()

Notes/Remarks:

INDUSTRIAL/ACADEMIC

N/A See #6 *

13. TRANSPORTATION (10 CFR 71.5a and 49 CFR 171-178)

- | | <u>yes</u>
() | <u>N/A</u>
() | <u>Vio.</u>
() |
|---|--|--|--|
| a. Licensee makes shipments of RAM?
Such Shipments are:
() delivered to common carriers?
() transported in licensee's own vehicle
as private carrier?
() both?
If a. above is yes, complete following items: | | | |
| b. Are authorized packages used? [173.415-416]
Types used:
() DOT-7A, Type A [173.415(a)]
Performance test records on file?
() DOT-55 [173.416(a)]
Licensee aware of 6/30/85 cutoff on use?
() Excepted, Instruments/articles [173.421-424]
() LSA-strong tight [173.425(b)(1)]
() NRC-Certified [173.416(b)]
NRC COC's on file? [71.12(c)(1)]
Registered with NRC as user? [71.12(c)(3)]
Documented NRC-Approved Q/A program?
[71.12(b)]
NRC Q/A Approval No.: _____
() Other: _____ | ()
() | ()
() | ()
() |
| c. Special Form Material performance test records
available for each source design? [173.476(a)] | () | () | () |
| d. Packages Labeled as required? [172.403(a)]
() Excepted () WI () YII () YIII
Surveys performed to select correct label
category and compliance with Rad. limits?
[173.474(i)] | () | () | () |
| e. Packages marked with required markings,
i.e., proper shipping name, Spec. No., COC No.,
etc. [172.300] | () | () | () |
| f. Shipping Papers prepared for each shipment?
[172.200]
Such papers contain required information?
[172.203(d)] | ()
() | ()
() | ()
() |
| g. For licensee private carrier shipments:
Vehicles placarded as required? [172.500]
Cargo blocked, braced, tied down in vehicle
[177.842(d)]
Any incidents reported to DOT? [171.15-16] | ()
()
() | ()
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() | ()
()
() |
| h. Does licensee ship any radwaste?
If yes, are shipments:
() tendered to common carriers by licensee?
() tendered through a Radwaste Broker?
If yes, name of Broker _____
Is licensee aware of 10 CFR 61 waste generator
requirements? [10 CFR 61]
Has licensee classified and characterized waste?
[20.311(d)] | ()
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