

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 30-19553[✓]/84-01(DRMSP)

Docket No. 30-19553

License No. 12-19985-01

Priority III

Category E

Licensee: Mid-States Logging and Perforating Co.

1013 W. Main Street

Olney, IL 62450

Inspection At: Fairfield, IL

Inspection Conducted: April 30 through May 3, 1984

Inspector: *D. R. Gibbons*
D. R. Gibbons

Radiation Specialist

June 12, 1984

Date

D. G. Wiedeman
Reviewed By: D. G. Wiedeman, Chief

Materials Radiation Protection

Section 1

June 13, 1984

Date

Approved By: W. L. Axelson, Chief

Materials and Safeguards Branch

Date

Inspection Summary

Inspection on April 30 through May 3, 1984 (Report No. 30-19553/84-01(DRMSP))

Areas Inspected: Routine, unannounced inspection of licensee audits; training; radiation protection procedures; equipment and facilities; receipt and transfer; personnel radiation protection, external and internal; shipping incidents; notifications and reports; inspection and maintenance of equipment and inventory of byproduct material. The inspection involved 14 inspector-hours onsite by one NRC inspector.

Results: Of the eleven areas inspected, ten (10) items of noncompliance were identified: (1) Licensed material used and stored at unauthorized location (License Condition No. 10) - (Section 6); (2) unauthorized users (License Condition No. 12) - (Section 4); (3) physical inventories were not performed at 6 month intervals (License Condition No. 15) - (Section 13); (4) improper source storage area (License Condition No. 18) - (Section 5); (5) no "Radiation Area" postings (10 CFR 20.203(b) and License Condition No. 18) - (Section 5); (6) no authorized radiation protection officer (License Condition No. 18) - (Section 4); (7) insufficient records of receiving and transfer of sealed sources (10 CFR 30.51) - (Section 7); (8) no shipping/transfer papers (49CFR172.200) - (Section 7); (9) no monthly vehicle surveys or quarterly storage area surveys completed (License Condition No. 18) - (Section 5); and (10) job log sheets were not maintained (License Condition No. 18) - (Section 5).

DETAILS

1. Persons Contacted

^{1,3}Donald A. Gherardini, Manager

Edward L. Beyers, Field Engineer

Steve Daley, Field Engineer

^{1,3}A. J. Pitchers, Owner

C. E. Paris, Illinois State Police

Carl W. Hubbartt, Former Manager (by telephone)

Carl M. Hubbartt, Former President (in Mattoon, IL)

²Sam Vandever, Field Engineer (by telephone)

^{2,3}Aaron Settles, Field Engineer (by telephone)

¹Denotes those present during exit interview.

²Denotes telephone contacts on May 7 and 8, 1984.

³Denotes those present during the Enforcement Conference on May 18, 1984

2. Description of Program

This license was issued on July 21, 1982, and authorizes the licensee to possess americium-241 sealed sources (Gulf Nuclear Model 71-1) not to exceed 5 curies per source, and cesium-137 sealed sources (Gulf Nuclear

Model CSV) not to exceed 2 curies per source. The sources are used for logging of oil and gas wells. The license also authorizes the possession of 25 millicuries of iodine-131 or iridium-192 for tracer studies in oil or gas wells.

3. Licensee Audits

The licensee is not required to perform audits, but the inspector reviewed records that indicated that on three occasions in 1983, employees were reprimanded for not following outlined procedures when operating logging tools and equipment. The licensee is revising its procedures and will more fully document audits and inspections when they are performed.

No items of noncompliance were identified.

4. Training

The inspector examined the records of training of the authorized users named in License Condition 12. Three users received the initial training required by the licensee's "Operating and Emergency Procedures Manual." The inspector learned from a review of records, and statements of licensee representatives, that only one of the users listed in Condition 12 was working for the licensee at the present time, and that person was recently

(April 3, 1984) rehired. The inspector also learned that unauthorized personnel used licensed material at some of the licensee's job sites during 1982 and 1983, as evidenced by the existing user log sheets. In addition the inspector learned that the Radiation Protection Officer named in the application dated July 11, 1982, was no longer working in that position, and had not performed those duties since July 7, 1983.

The existing training records reviewed by the inspector indicated that the personnel employed to use licensed material were properly trained and that those employed by the licensee, at present, were properly trained. The licensee is going to amend the license to name those individuals as users, and the name of the new Radiation Safety Officer will be submitted for approval. The use of licensed material by unauthorized personnel constitutes noncompliance with License Condition 12.

The failure to maintain the authorized Radiation Safety Officer as named in the application dated July 11, 1982 constitutes noncompliance with License Condition 18.

Two items of noncompliance were identified.

5. Radiation Protection Program

The inspector was unable to observe field operations, but did review job sheet records maintained from November 1982 to August 27, 1983. Licensee personnel informed the inspector that licensed material was used beyond that date, but licensee personnel were told that they would no longer be

required to maintain job sheet records. They were informed verbally that the manager was maintaining the required job sheets. However, no records or job sheets could be located beyond August 27, 1983. Appendix B, Section III of the licensee's "Storage, Operating and Emergency Procedures Manual" approved for the license requires certain information to be recorded on job sheets each time licensed material is used.

The failure to maintain job log sheets as required by the referenced manual submitted in support of the application dated July 11, 1982, constitutes noncompliance with License Condition 18.

The inspector observed two containers stored on top of a wooden pallet located inside the licensee's warehouse. Shipping labels indicated each container held 2 curies of cesium-137. The inspector performed radiation surveys on contact with the containers and around the pallet with a Gamma Industries Model 252B survey instrument, last calibrated on April 23, 1984. Licensee personnel performed similar surveys with a Victoreen Model 493 survey instrument, last calibrated November 16, 1983. Both instruments detected a maximum of 10 mR/hr on contact with the containers, and 0.7 mR/hr to 6.0 mR/hr around the outer edge of the pallet. Another container was observed stored near a truck located in the center of the licensee's warehouse. Shipping labels indicated the container held americium-241. Radiation surveys with the same two instruments detected 0.7 mR/hr to 6 mR/hr on contact with the shipping container. The storage areas did not conform to the storage area requirements described in Appendix B, Section I(a)(1)(2) of the referenced manual approved for this license. That section requires that licensed material be stored in

downhole storage pits, or in steel bunkers, with a locking device. The sources were moved to a new location and signs were being ordered to place on the new storage area. Licensee representatives stated that the area will be locked. Radiation surveys indicated a maximum reading of 0.2 mR/hr on the outer wall of the storage area.

The failure of the licensee to provide proper storage areas for licensed materials as required by the referenced manual approved for this license constitutes noncompliance with License Condition 18.

License Condition No. 18 requires that licensed material be possessed and used in accordance with Statements, representations and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. The "Storage, Operating and Emergency Procedures Manual" submitted in support of those applications states in Section VI(e)(F) that monthly surveys of vehicles and quarterly surveys of the storage areas will be performed.

It was determined through statements by licensee representatives and the NRC inspector's review of survey records that the licensee discontinued performing the vehicle and storage area surveys on August 27, 1983.

The licensee's failure to perform the vehicle and storage area surveys constitutes noncompliance with License Condition 18.

The storage areas were not posted as required by Appendix A, Section V(a) and Appendix B, Section I(a)(3) of the above referenced manual or 10 CFR 20.203(b). Appendix A, Section V(a) requires restricted or storage areas

where radiation levels are expected to exceed 2 mR/hr to be posted "Caution Radiation Area" or "Caution Radioactive Material"; Appendix B, Section I(a)(3) requires each storage area to be posted "Caution Radioactive Material"; 10 CFR 20.203(b) requires each radiation area to be posted "Caution Radiation Area".

The failure to post the storage areas as required by the referenced section of the manual approved for this license constitutes noncompliance with license Condition 18. The failure to post the radiation area constitutes noncompliance with 10 CFR 20.203(b).

Four items of noncompliance were identified.

6. Equipment and Facilities

- a. The licensee is authorized to use byproduct material at 1013 W. Main, Olney, Illinois, or at temporary job sites of the licensee anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction (License Condition 10). Its mailing address was 1013 W. Main Street, Olney, Illinois 62450 until August 1, 1982. The licensee moved its facilities to the Fairfield address at that time, but failed to amend the license to reflect that change. The inspector was able to inspect the Olney, Illinois building, and found no radioactive contamination or radiation readings above normal background.

The failure to amend the license to reflect a change of address and to change the location where licensed material may be used, constitutes noncompliance with License Condition 10.

- b. Survey meters (4) were calibrated by Gulf Nuclear in Webster City, Texas. All instruments were in calibration at the time of this inspection. The inspector's review of records indicated that the licensee calibrated survey instruments at the proper intervals.

One item of noncompliance was identified.

7. Receipt and Transfer

- a. The inspector was unable to review all of the licensee's receipt and transfer records, because the licensee has failed to maintain these records as required by 10 CFR 30.51.

The failure to maintain records of receipt, transfer, and disposal of byproduct material constitutes noncompliance with 10 CFR 30.51.

- b. The licensee maintained records of radioactive material transferred from its facility to job sites, but discontinued maintaining those records after August 27, 1983. Licensee personnel informed the inspector that they transferred and transported byproduct material in its vehicles on numerous occasions since that date without the proper Department of Transportation (DOT) or licensee's shipping papers.

49 CFR 172.200 requires that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper. The failure to maintain transfer records or proper shipping papers constitutes noncompliance with 49 CFR 172.200.

- c. Existing records, and the inspector's examination of three shipping containers, indicated that proper shipping containers were used and proper DOT labels were affixed to the containers.

Two items of noncompliance were identified.

8. Personnel Radiation Protection - External

The licensee uses the Gulf Nuclear Dosimetry Service in Webster, Texas. The dosimetry devices are turned in for processing each month. The dosimetry devices monitor the exposure to neutron and gamma radiation. The inspector's review of the exposure records indicated that no individual was exposed to radiation in excess of 10 CFR 20.101 limits.

No items of noncompliance were identified.

9. Personnel Radiation Protection - Internal

- a. The licensee's procedure for leak testing the sealed sources was found to be in agreement with the procedure outlined in its manual. The leak tests were mailed to, and processed by, Gulf Nuclear, Webster, Texas.

- b. The inspector's review of records indicated that the sealed sources were leak tested every six months and the amount of removable contamination was less than 0.005 microcuries.

No items of noncompliance were identified.

10. Shipping Incidents

According to a licensee representative, there have been no shipping incidents.

No item of noncompliance was identified.

11. Notification and Reports

The licensee verbally notified the Nuclear Regulatory Commission on May 1, 1984, that a 3 curie americium-241/beryllium source was missing from their facility. In accordance with 10 CFR 20.402, on May 18, 1984, the licensee submitted the required written report explaining the loss of this source.

The lost source was subsequently found on May 16, 1984 in Stanton, Kentucky. The loss of the source is still under investigation by the NRC and other State and federal agencies. This is an Unresolved Item.

12. Inspection and Maintenance of Equipment

- a. Each field engineer performs a maintenance check of the equipment, and recalibrates the logging tool before each new job.
- b. The inspector's review of records indicated that all of the equipment was thoroughly inspected on April 12 and 13, 1984, and at proper intervals before that date.

No items of noncompliance were identified.

13. Inventory of Byproduct Material

- a. The licensee was using the authorized sources and equipment for well logging purposes.
- b. The licensee did not conduct physical inventories at six (6) month intervals to account for all sealed sources received and possessed under the license. An inventory was conducted on April 13, 1984. That inventory, and a leak test performed on November 11, 1983, indicated that a three (3) curie americium-241/beryllium sealed source was missing from the licensee's facility. The sealed source could not be located during the inspection, and was assumed to be lost or stolen. The licensee reported the loss to the Illinois State police who were investigating this matter. This issue is considered an Unresolved Item and has been referred to the NRC Office of Investigation and the Federal Bureau of Investigation.

The failure to conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license constitutes noncompliance with License Condition 15.

One item of noncompliance was identified.

14. Enforcement Conference

On May 18, 1984, an Enforcement Conference was held in the Region III office with Messrs. Donald A. Gherardini, A. J. Pitchers, and Aaron P. Settles, to discuss the inspection findings, corrective actions, and the NRC enforcement options. The licensee assured the NRC that all future licensed activities will be conducted in full compliance with the regulations and the conditions of their license.

CONVERSATION RECORD

TIME

DATE

6/25/84

TYPE

☐ VISIT

☒ CONFERENCE

☐ TELEPHONE

ROUTING

NAME/SYMBOL INT

Location of Visit/Conference: *Sec. No. 12-24320 (Letter # 76517)*

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Mr. Hubbert, and Sam Ennis

ORGANIZATION (Office, dept., bureau, etc.)

United Wireless Serv. Div.

TELEPHONE NO.

(618) 812-7838

SUBJECT

B. Mallett, B. Davis, and B. Arabin from the NAC met with the receiver.

B. Davis and B. Arabin asked questions and expressed their concern with Mr. Hubbert's competency to him program in view of his past performance at Mid-State Logging.

SUMMARY

*B. Mallett then went through the following:
In order to complete some and issues raised, need additional info. on and/or clarification of the following items:*

1. Location of site for storage, receipt of materials and for which equipment trucks with materials will be dispatched to temporary job site at well head.

*Temporary address
Location*

a. Need description diagram indicating storage area, adjacent areas. Also discuss fire hazards.

*no record
in 12-24320*

b. For ~~the~~ unsealed (I-131 & I-192) need description of sample ppg area, receipt area, down area as in sub. 5. of Item 9. c., page 12. of guide.

c. Where will temporary job site be located - didn't indicate you wanted any. + commitment to conduct activities while in use at site.

2. Source model no. Clarify. We do not have model no. 618 63 listed in our registry. b. Indicate if source want.

3. a. Need to clarify describe intended use of I-131 and I-192 in more detail than submitted. (e.g., exact channel, not field fired outside).

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

From Carl Hubbert - may wish to not

SIGNATURE

apply at this time for unsealed & apply letter, so can get device & etc.

ACTION TAKEN

Telephone briefing

SIGNATURE

James J. Mallett

TITLE

DATE

6/27/84

3. ^{2. need will deliver} For unrecalled - ¹⁹²⁵ ~~break~~ program - e.g., will you ^{have} materials at 1425 Maple Ave, prepare them & transport to well site or will you receive them at well site.

4. RSD

a. Indicate statement of commitment for C. Hubbert to running program in view of his last program at Mid States showed no records kept and poor rad. safety program.

b. Duties need to be expanded to include items d, e, g, and h. of well logging guide.

5. Training of personnel

a. Clarify who will be doing work on license. App only indicates C. Hubbert. However, app 4, pg 1 of manual indicates he will be training & qualifying people. If training his own to be users, need program as in Item 7. of guide. Retaining program?

b. Need to specify training program & frequency for auxiliary personnel (e.g. secretary) as in Item 8 of guide. We recommend upon employment & after & include procedure such as receipt.

c. Need program for new pair to working on your license as in Item 10.3.1. of guide.

6. Personnel monitoring

a. Clarify how Guff has been will be analyzing film badges since they are not to our knowledge a film badge service.

b. Need to commit to monthly exchanges of film badges & not quarterly as indicated on page 1, app A of manual.

c. Also need to consider program of handling protection from 1-131 present use by Guide 8.20

7. Facilities & equipment

a. Survey meter calibration - Victoreen 493 ^{NOTE: It is not a neutron detector}
 → How will they make sure have enough ~~with~~ available if have one in field & one in shop during period when send for calibration.

b. Need also Item 9. C. 4. sketches of all handling tools used. App says you only submitted one for form 241. - need form 137

Telephone efficiency

Burns & McElvett

6/5/84

CONVERSATION RECORD

TIME

DATE

TYPE

☐ VISIT

☐ CONFERENCE

☐ TELEPHONE

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

☐ INCOMING

☐ OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

ORGANIZATION (Office, dept., bureau, etc.)

TELEPHONE NO.

SUBJECT

Sec. No. 12-24320-01 Control # 76597

SUMMARY

- (Contd):
7. c. Need description as in Item 9. c. 3. of guide of all transport containers. Appns only submitted one for Am 241. Also - P type security list on all of them.
 8. a. Note as in Section 305 of a of 12-45 Part 30 - for obtaining written agreement prior to drilling.
 - b. For transporting - must commit to DOT regulations for sealed carrier transport. Your manual indicates the fr. was sealed.
 - c. For back test procedures. Indicate in your app. that you will be using a bull hound back test kit. In addition, you must specify who will be doing & at what points (e.g., inside of container). Also need to commit to gross loading with bin prior to mailing to port for possible unnecessary rad. exposure.
 - d. Need utilization records system as in Item 10.2.7 of guide.
 - e. Need inspection and maintenance program as in Item 10.2.9. and 18.
 9. f. Records - need to commit to maintenance of such at field office.
- ACTION REQUIRED
- Temp. fixate as in Item 10.5.2 and 10.5.3 of guide.

10. What's different

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

ACTION TAKEN

OVER →

SIGNATURE

Edward Marshall

TITLE

Telephone deficiency

DATE

6/2/84

could:
10. b. Need methods of handling of solid wastes (e.g., wipe tests, gloves, absorbent paper, etc.) from I-131 and I-132 operations. We suggest decay-in-storage.

11. Certification

C. Hubbert signed license & it appears we are dealing with M. Hubbert on application. Clarify who is in charge.

12. Fishing operations

Commit to planning prior to in order to not damage commercial housing.

13. Commit to not removing source from power vessel.

Asked licensee to respond within 30 days.

Telephone deficiency Bruce D. McElveth 6/25/84

JUL 2 1984

United Wireline Service, Inc.
ATTN: Carl W. Hubbartt
P. O. Box 649
Fairfield, IL 62837

Gentlemen:

Enclosed is your NRC License Number 12-24320-01 in accordance with your request.

Please note we have not authorized you to use iodine-125 or iridium-192 for tracer studies as requested as indicated to you in our meeting on June 25, 1984. In order to authorize your request, you will need to submit a description of your intended use of these materials (e.g., cement channel, not field flood studies); a description and/or diagram indicating storage, receipt, sample preparation and decontamination areas as per Item 9.C. No. 5. of the enclosed well logging guide; and a description of how materials are received, transported to the well site, and utilized at the well site from a radiation safety perspective. These items are in addition to those submitted in your March 23, 1984 application.

Please review the enclosed document carefully and be sure that you understand all conditions. Unless your license has been terminated, you must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address.
5. Request and obtain appropriate amendments if you plan to change ownership of your organization, change locations of radioactive material, or make any other changes in your facility or program which are contrary to your license conditions or representations made in your license application and any supplemental correspondence with NRC. Any amendment request should be accompanied by the appropriate fee specified in 10 CFR Part 170.

A10

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NMS LIC30
12-24320-01

PDR 2pp.

6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
7. Request termination of your license if you plan to permanently discontinue activities involving radioactive material prior to your expiration date.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions and representations in your license application will result in enforcement action against you in accordance with the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

If you have any questions or require clarification on any of the above stated information, please contact us at (312) 790-5625.

Sincerely,

Bruce S. Mallett, Ph.D., Chief
Materials Licensing Section

- Enclosures:
1. NRC License
 2. Well logging guide (Jan., 1984)
 3. 10 CFR 19, 20, 170
 4. Appendix C, 10 CFR 2

RIII

Mallett/bm

07/03/84

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s); and to import such byproduct and source material. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. United Wireline Service, Inc.		3. License number 12-24320-01
2. P. O. Box 649 Fairfield, IL 62837		4. Expiration date July 31, 1989
		5. Docket or Reference No.
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Americium-241	A. Sealed sources (Gulf Nuclear, Inc. Model No. NEEI-AmBe-71-1)	A. 3 sources not to exceed 4.6 curies each
B. Cesium-137	B. Sealed sources (Gulf Nuclear, Inc. Model No. CSV)	B. 3 sources not to exceed 2 curies each
9. Authorized Use		
A. and B. To be used in well-logging of oil and gas wells.		

CONDITIONS

10. Licensed material may be used at the licensee's facilities at 1925 Maple Avenue, Mattoon, Illinois, Rural Route Industrial Park, Fairfield, Illinois and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
12. Licensed material shall be used by, or under the supervision and in the physical presence of, Carl W. Hubbart.

All

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12-24320-01 PDR

3PP.

COPY 2

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

12-24320-01

Docket or Reference number

13. A. (1) Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
- (2) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U.S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter received June 28, 1984 for analysis by Gulf Nuclear, Inc.
14. Sealed sources containing licensed material shall not be opened or removed from their respective source holder or pressure vessels by the licensee.
15. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."
16. The licensee shall report by telephone within 24 hours to the nearest U.S. Nuclear Regulatory Commission Office the loss or potential abandonment down-hole of any sealed source containing licensed material. In addition, a written report shall be submitted within 30 days for the lost or abandoned source which shall include information regarding isotope, amount, location, depth, method of immobilization, sealing, placarding, and notations to be placed in public records.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number:

12-24320-01

Docket or Reference number

17. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application dated March 23, 1984 and letter received June 28, 1984. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

For the U.S. Nuclear Regulatory Commission

Date July 2, 1984Original Signed
By Bruce S. Mallett
Materials Licensing Section, Region III

COPY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

12-19985-01

JUL 10 1984

License No. 12-19985-01
EA 84-61

Mid-States Logging and
Perforating Co.
ATTN: Donald A. Gherardini
Manager
Route 45 North, Box 39
Fairfield, IL 62837

Gentlemen:

This refers to the NRC routine safety inspection conducted by Mr. D. R. Gibbons of this office on April 30 through May 2, 1984 of activities authorized by NRC License No. 12-19985-01. During the inspection, numerous violations of NRC requirements were identified. The results of the inspection were discussed with you at the conclusion of the inspection, and on May 18, 1984, during the enforcement conference at the NRC Region III office between you and members of your staff and Mr. A. B. Davis and others of the NRC staff.

The apparent violations are described in the attached Notice of Violation and Proposed Imposition of Civil Penalties. Collectively they represent a breakdown in management oversight and control of your radiation safety program and demonstrate a clear need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of these matters and the need to ensure implementation of effective management control of your licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Five Hundred Dollars for the violations set forth in the Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984).

This inspection identified a possible theft of licensed material which has been referred to our Office of Investigations for investigation. Appropriate enforcement action regarding the findings of the investigation will be taken at its conclusion. You will be notified of the results of this review.

You are required to respond to this letter and should follow the instructions in the Notice when preparing your response. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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2 pp.

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Mid-States Logging and
Perforating Co.

2

JUL 10 1984

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

The responses directed by this letter and the accompanying report are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

Original signed by
James G. Keppler

James G. Keppler
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition
of Civil Penalties

Distribution

PDR
SECY
CA
RCDeYoung, IE
JTaylor, IE
JAxelrad, IE
EFlack, IE
JLieberman, ELD
VStello, DED/ROGR
LCobb, IE
Fingram, PA
VMiller, NMSS
JCrooks, AEOD
GMessenger, OIA
BHayes, OI
DNussbaumer, OSP
RECunningham, NMSS
Enforcement Coordinators
RI, RII, RIII, RIV, RV
IE:ES Files
IE:EA Files
EDO Rdg File
DCS

IE:ES
EFlack
6/28/84

S. R. R. ELD
JLieberman
7/2/84

RIII
WSchultz
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ES
JAxelrad
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IE:ES
JTaylor
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IE:ES
RCDeYoung
7/3/84

RIII
Axelson/np
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NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Mid-States Logging and
Perforating Co.
Route 45 North, Box 39
Fairfield, IL 62837

License No. 12-19985-01
EA 84-61

An NRC inspection of activities authorized under NRC License No. 12-19985-01 was conducted on April 30 through May 2, 1984. During the inspection, multiple instances of failures to comply with NRC requirements were identified. Collectively, they represent a breakdown in the management oversight and control of the licensee's radiation safety program.

To emphasize the importance of these matters and the need to ensure implementation of effective management control over the radiation safety program, the NRC proposes to impose civil penalties in the cumulative amount of Five Hundred Dollars. In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and the associated civil penalties are set forth below:

- A. License Condition No. 10 limits the use of byproduct material to 1013 N. Main Street, Olney, Illinois, and at temporary job sites anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.

Contrary to this requirement, licensed material was used and stored at Route 45 North, Fairfield, Illinois, since August 1, 1982, a location not authorized by the license.

- B. License Condition No. 12 requires that licensed material be used under the supervision and in the physical presence of certain named individuals.

Contrary to this requirement, licensed material was used on numerous occasions during the period from 1982 to 1983 by individuals not named on the license and such use was not under the supervision of or in the physical presence of individuals named under the license.

- C. License Condition No. 15 requires a physical inventory every six (6) months to account for all sealed sources possessed and used under the license.

Contrary to this requirement, the licensee failed to conduct physical inventories during the period from November 2, 1982 to April 13, 1984, a period exceeding six (6) months.

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Notice of Violation

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- D. License Condition No. 18 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981 with enclosures thereto. Appendix B, Section I(a)(1)(2) of the Storage, Operating and Emergency Procedures Manual submitted as part of the applications dated December 15, 1981 and April 25, 1982, states that licensed material will be stored in storage pits (downhole), or in a steel bunker with a locking device.

Contrary to this requirement, licensed material has been stored on a wooden pallet, above ground, and with no locking device since August 2, 1982.

- E. 10 CFR 20.203(b) requires that each radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution (or Danger)-Radiation Area." 10 CFR 20.202(b)(2) defines a radiation area as any area, accessible to personnel, in which there exists radiation, originating in whole or in part within licensed material, at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirems, or in any 5 consecutive days, a dose in excess of 100 millirems. Appendix B, Section I(a)(3) in the licensee's Operating Manual requires the above signs on or around storage areas. In addition, that section of the Manual requires signs bearing the words: "Caution Radioactive Materials" to be posted on storage areas.

Contrary to this requirement, during the period April 30 through May 2, 1984, a container with 2 curies of cesium-137 was stored on a wooden pallet inside the licensee's warehouse with radiation levels of 6 millirem per hour at the perimeter of the pallet and the licensee did not post signs labeled "Caution (or Danger)-Radiation Area" or "Caution Radioactive Materials."

- F. License Condition No. 18 requires licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. The application dated July 11, 1982 names a certain individual as the Radiation Safety Officer.

Contrary to this requirement, the licensee has operated without any radiation safety officer since July 7, 1983, the day the authorized Radiation Safety Officer terminated employment.

- G. 10 CFR 30.51(a) requires that each licensee keep records showing the receipt, transfer, and disposal of licensed material.

Contrary to this requirement, the licensee failed to maintain receipt records of two sealed sources purchased in December 1982 and February 1984.

- H. 10 CFR 71.5(a) requires that no licensee shall transport any licensed material outside of the confines of its plant or other place of use unless

JUL 16 1984

the licensee complies with the applicable regulations of the Department of Transportation in 49 CFR Parts 170-189.

49 CFR 172.200(a) requires each person who offers a hazardous material for transportation to describe the hazardous material on the shipping paper in the manner required by this subpart.

Contrary to this requirement, the licensee transported hazardous material (radioactive) from its facility to temporary job sites during the period from August 27, 1983 to January 14, 1984 without proper shipping papers.

- I. License Condition No. 18 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. Appendix A, Section VI(e)(f) of the Storage, Operating and Emergency Procedure Manual submitted with the applications dated December 15, 1981 and July 11, 1982 requires monthly surveys of licensee vehicles and quarterly surveys of the storage areas.

Contrary to this requirement, the licensee failed to perform monthly vehicle surveys, and failed to perform quarterly surveys of the storage areas since August 27, 1983.

- J. License Condition No. 18 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. Appendix B, Section III of the Storage, Operating and Emergency Procedures Manual submitted as part of the applications dated December 15, 1981 and July 11, 1982 requires job log sheets be maintained for each time licensed material is used at temporary job sites.

Contrary to this requirement, job log sheets were not maintained for the period from August 27, 1983 through May 2, 1984.

Collectively, the above violations have been evaluated as a Severity Level III problem (Supplements IV, V, and VI).

(Cumulative Civil Penalties - \$500 assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, Mid-States Logging and Perforating Co. is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, with a copy to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that will be taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

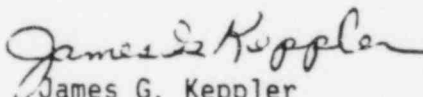
JUL 16 1984

Within the same time as provided for the response required above under 10 CFR 2.201, Mid-States Logging and Perforating Co. may pay the civil penalties in the amount of Five Hundred Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Mid-States Logging and Perforating Co. fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should Mid-States Logging and Perforating Co. elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalties should not be imposed.

In addition to protesting the civil penalties, in whole or in part, such answer may request remission or mitigation of the penalties. In requesting mitigation of the proposed penalties, the five factors contained in Section V.B of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Mid-States Logging and Perforating Co. is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty due, which has been subsequently determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION


James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 10th day of July 1984



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

12-19985-01

JUL 10 1984

Mid-States Logging and
Perforating Co.
ATTN: Donald A. Gherardini
Manager
Route 45 North, Box 39
Fairfield, IL 62837

License No. 12-19985-01
EA 84-61

Gentlemen:

This refers to the safety inspection conducted on April 30 through May 2, 1984 of activities authorized by NRC Byproduct Material License No. 12-19985-01. The report setting forth the results of the inspection and the enforcement conference held on May 18, 1984, is enclosed.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractors) believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within ten (10) days from the date of this letter of your intention to file a request for withholding; and (b) submit within twenty-five (25) days from the date of this letter a written application to this office to withhold such information. If your receipt of this letter has been delayed such that less than seven (7) days are available for your review, please notify this office promptly so that a new due date may be established. Consistent with Section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons which are the bases for the claim that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, a copy of this letter and the enclosures will be placed in the Public Document Room.

A separate letter is enclosed that sets forth certain matters of concern and the violations found during this inspection. The responses directed by this letter are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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Mid-States Logging and
Perforating Co.

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JUL 10 1984

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

Original signed by
James G. Keppler

James G. Keppler
Regional Administrator

Enclosure: Inspection Report
No. 030-19553/84-01(DRSS)

cc w/encl:
DMB/Document Control Desk

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WVS
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Keppler
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 30-19553/84-01(DRSS)

Docket No. 30-19553

License No. 12-19985-01

Priority III

Category E

Licensee: Mid-States Logging and Perforating Co.
1013 W. Main Street
Olney, IL 62450

Inspection At: Fairfield, IL

Inspection Conducted: April 30 through May 3, 1984

Inspector: *D. R. Gibbons*
D. R. Gibbons
Radiation Specialist

July 9, 1984
Date

Reviewed By: *D. G. Wiedeman*
D. G. Wiedeman, Chief
Materials Radiation Protection
Section 1

July 9, 1984
Date

Approved By: *W. L. Axelson*
W. L. Axelson, Chief
Materials and Safeguards Branch

July 9, 1984
Date

Inspection Summary

Inspection on April 30 through May 3, 1984 (Report No. 30-19553/84-01(DRSS))

Areas Inspected: Routine, unannounced inspection of licensee audits; training; radiation protection procedures; equipment and facilities; receipt and transfer; personnel radiation protection, external and internal; shipping incidents; notifications and reports; inspection and maintenance of equipment and inventory of byproduct material. The inspection involved 14 inspector-hours onsite by one NRC inspector.

Results: Of the eleven areas inspected, ten (10) items of noncompliance were identified: (1) Licensed material used and stored at unauthorized location (License Condition No. 10) - (Section 6); (2) unauthorized users (License Condition No. 12) - (Section 4); (3) physical inventories were not performed at 6 month intervals (License Condition No. 15) - (Section 13); (4) improper source storage area (License Condition No. 18) - (Section 5); (5) no "Radiation Area" postings (10 CFR 20.203(b) and License Condition No. 18) - (Section 5); (6) no authorized radiation protection officer (License Condition No. 18) - (Section 4); (7) insufficient records of receiving and transfer of sealed sources (10 CFR 30.51) - (Section 7); (8) no shipping/transfer papers (49 CFR 172.200) - (Section 7); (9) no monthly vehicle surveys or quarterly storage area surveys completed (License Condition No. 18) - (Section 5); and (10) job log sheets were not maintained (License Condition No. 18) - (Section 5).

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DETAILS

1. Persons Contacted

- ^{1,3}Donald A. Gherardini, Manager
- Edward L. Beyers, Field Engineer
- Steve Daley, Field Engineer
- ^{1,3}A. J. Pitchers, Owner
- C. E. Paris, Illinois State Police
- Carl W. Hubbartt, Former Manager (by telephone)
- Carl M. Hubbartt, Former President (in Mattoon, IL)
- ²Sam Vandever, Field Engineer (by telephone)
- ^{2,3}Aaron Settles, Field Engineer (by telephone)

¹Denotes those present during exit interview.

²Denotes telephone contacts on May 7 and 8, 1984.

³Denotes those present during the Enforcement Conference on May 18, 1984

2. Description of Program

This license was issued on July 21, 1982, and authorizes the licensee to possess americium-241 sealed sources (Gulf Nuclear Model 71-1) not to exceed 5 curies per source, and cesium-137 sealed sources (Gulf Nuclear Model CSV) not to exceed 2 curies per source. The sources are used for logging of oil and gas wells. The license also authorizes the possession of 25 millicuries of iodine-131 or iridium-192 for tracer studies in oil or gas wells.

3. Licensee Audits

The licensee is not required to perform audits, but the inspector reviewed records that indicated that on three occasions in 1983, employees were reprimanded for not following outlined procedures when operating logging tools and equipment. The licensee is revising its procedures and will more fully document audits and inspections when they are performed.

No items of noncompliance were identified.

4. Training

The inspector examined the records of training of the authorized users named in License Condition 12. Three users received the initial training required by the licensee's "Operating and Emergency Procedures Manual." The inspector learned from a review of records, and statements of licensee representatives, that only one of the users listed in Condition 12 was working for the licensee at the present time, and that person was recently (April 3, 1984) rehired. The inspector also learned that unauthorized personnel used licensed material at some of the licensee's job sites during 1982 and 1983, as evidenced by the existing user log sheets. In addition the inspector learned that the Radiation Protection Officer named in the application dated July 11, 1982, was no longer working in that position, and had not performed those duties since July 7, 1983.

The existing training records reviewed by the inspector indicated that the personnel employed to use licensed material were properly trained and that those employed by the licensee, at present, were properly trained. The licensee is going to amend the license to name those individuals as users, and the name of the new Radiation Safety Officer will be submitted for approval. The use of licensed material by unauthorized personnel constitutes noncompliance with License Condition 12.

The failure to maintain the authorized Radiation Safety Officer as named in the application dated July 11, 1982 constitutes noncompliance with License Condition 18.

Two items of noncompliance were identified.

5. Radiation Protection Program

The inspector was unable to observe field operations, but did review job sheet records maintained from November 1982 to August 27, 1983. Licensee personnel informed the inspector that licensed material was used beyond that date, but licensee personnel were told that they would no longer be required to maintain job sheet records. They were informed verbally that the manager was maintaining the required job sheets. However, no records or job sheets could be located beyond August 27, 1983. Appendix B, Section III of the licensee's "Storage, Operating and Emergency Procedures Manual" approved for the license requires certain information to be recorded on job sheets each time licensed material is used.

The failure to maintain job log sheets as required by the referenced manual submitted in support of the application dated July 11, 1982, constitutes noncompliance with License Condition 18.

The inspector observed two containers stored on top of a wooden pallet located inside the licensee's warehouse. The inspector was informed that this location had been used as a storage area since August 1, 1982. Shipping labels indicated each container held 2 curies of cesium-137. The inspector performed radiation surveys on contact with the containers and around the pallet with a Gamma Industries Model 252B survey instrument, last calibrated on April 23, 1984. Licensee personnel performed similar surveys with a Victoreen Model 493 survey instrument, last calibrated November 16, 1983. Both instruments detected a maximum of 10 mR/hr on contact with the containers, and 0.7 mR/hr to 6.0 mR/hr around the outer edge of the pallet. Another container was observed stored near a truck located in the center of the licensee's warehouse. Shipping labels indicated the container held americium-241. Radiation surveys with the same two instruments detected 0.7 mR/hr to 6 mR/hr on contact with the shipping container. The storage areas did not conform to the storage area requirements described in Appendix B, Section I(a)(1)(2) of the referenced manual approved for this license. That section requires that licensed material be stored in downhole storage pits, or in steel bunkers, with a locking device. The sources were moved to a new location and signs were being ordered to place on the new storage area. Licensee representatives stated that the area will be locked. Radiation surveys indicated a maximum reading of 0.2 mR/hr on the outer wall of the storage area.

The failure of the licensee to provide proper storage areas for licensed materials as required by the referenced manual approved for this license constitutes noncompliance with License Condition 18.

License Condition No. 18 requires that licensed material be possessed and used in accordance with Statements, representations and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. The "Storage, Operating and Emergency Procedures Manual" submitted in support of those applications states in Appendix A, Section VI(e)(f) that monthly surveys of vehicles and quarterly surveys of the storage areas will be performed.

It was determined through statements by licensee representatives and the NRC inspector's review of survey records that the licensee discontinued performing the vehicle and storage area surveys on August 27, 1983. The licensee's failure to perform the vehicle and storage area surveys constitutes noncompliance with License Condition 18.

The storage areas were not posted as required by Appendix A, Section V(a) and Appendix B, Section I(a)(3) of the above referenced manual or 10 CFR 20.203(b). Appendix A, Section V(a) requires restricted or storage areas where radiation levels are expected to exceed 2 mR/hr to be posted "Caution Radiation Area" or "Caution Radioactive Material"; Appendix B, Section I(a)(3) requires each storage area to be posted "Caution Radioactive Material"; 10 CFR 20.203(b) requires each radiation area to be posted "Caution Radiation Area".

The failure to post the storage areas as required by the referenced section of the manual approved for this license constitutes noncompliance with license Condition 18. The failure to post the radiation area constitutes noncompliance with 10 CFR 20.203(b).

Four items of noncompliance were identified.

6. Equipment and Facilities

- a. The licensee is authorized to use its product material at 1013 W. Main, Olney, Illinois, or at temporary sites of the licensee anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction (License Condition 10). Its mailing address was 1013 W. Main Street, Olney, Illinois 62450 until August 1, 1982. The licensee moved its facilities to the Fairfield address at that time, but failed to amend the license to reflect that change. The inspector was able to inspect the Olney, Illinois building, and found no radioactive contamination or radiation readings above normal background.

The failure to amend the license to reflect a change of address and to change the location where licensed material may be used, constitutes noncompliance with License Condition 10.

- b. Survey meters (4) were calibrated by Gulf Nuclear in Webster City, Texas. All instruments were in calibration at the time of this inspection. The inspector's review of records indicated that the licensee calibrated survey instruments at the proper intervals.

One item of noncompliance was identified.

7. Receipt and Transfer

- a. The inspector was unable to review all of the licensee's receipt and transfer records, because the licensee has failed to maintain these records, as required by 10 CFR 30.51, for two sealed sources purchased in December 1982 and February 1984.

The failure to maintain records of receipt, transfer, and disposal of byproduct material constitutes noncompliance with 10 CFR 30.51.

- b. The licensee maintained records of radioactive material transferred from its facility to job sites, but discontinued maintaining those records from August 27, 1983 to January 14, 1984. Licensee personnel informed the inspector that they transferred and transported byproduct material in its vehicles on numerous occasions during that period without the proper Department of Transportation (DOT) or licensee's shipping papers. No work was done from the Fairfield, Illinois facility during the period January 14, 1984 through May 3, 1984. Also, the records for the Stanton, Kentucky facility were not reviewed for work done during this period.

49 CFR 172.200 requires that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper. The failure to maintain transfer records or proper shipping papers constitutes noncompliance with 49 CFR 172.200.

- c. Existing records, and the inspector's examination of three shipping containers, indicated that proper shipping containers were used and proper DOT labels were affixed to the containers.

Two items of noncompliance were identified.

8. Personnel Radiation Protection - External

The licensee uses the Gulf Nuclear Dosimetry Service in Webster, Texas. The dosimetry devices are turned in for processing each month. The dosimetry devices monitor the exposure to neutron and gamma radiation. The inspector's review of the exposure records indicated that no individual was exposed to radiation in excess of 10 CFR 20.101 limits.

No items of noncompliance were identified.

9. Personnel Radiation Protection - Internal

- a. The licensee's procedure for leak testing the sealed sources was found to be in agreement with the procedure outlined in its manual. The leak tests were mailed to, and processed by, Gulf Nuclear, Webster, Texas.

- b. The inspector's review of records indicated that the sealed sources were leak tested every six months and the amount of removable contamination was less than 0.005 microcuries.

No items of noncompliance were identified.

10. Shipping Incidents

According to a licensee representative, there have been no shipping incidents.

No item of noncompliance was identified.

11. Notification and Reports

The licensee verbally notified the Nuclear Regulatory Commission on May 1, 1984, that a 3 curie americium-241/beryllium source was missing from their facility. In accordance with 10 CFR 20.402, on May 18, 1984, the licensee submitted the required written report explaining the loss of this source.

The lost source was subsequently found on May 16, 1984 in Stanton, Kentucky. The loss of the source is still under investigation by the NRC and other State and federal agencies. This is an Unresolved Item.

12. Inspection and Maintenance of Equipment

- a. Each field engineer performs a maintenance check of the equipment, and recalibrates the logging tool before each new job.
- b. The inspector's review of records indicated that all of the equipment was thoroughly inspected on April 12 and 13, 1984, and at proper intervals before that date.

No items of noncompliance were identified.

13. Inventory of Byproduct Material

- a. The licensee was using the authorized sources and equipment for well logging purposes.
- b. The licensee did not conduct physical inventories at six (6) month intervals to account for all sealed sources received and possessed under the license. An inventory was conducted on April 13, 1984. That inventory, and a leak test performed on November 11, 1983, indicated that a three (3) curie americium-241/beryllium sealed source was missing from the licensee's facility. The sealed source could not be located during the inspection, and was assumed to be lost or stolen. The licensee reported the loss to the Illinois State police who were investigating this matter. This issue is considered an Unresolved Item and has been referred to the NRC Office of Investigation and the Federal Bureau of Investigation.

The failure to conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license constitutes noncompliance with License Condition 15.

One item of noncompliance was identified.

14. Enforcement Conference

On May 18, 1984, an Enforcement Conference was held in the Region III office with Messrs. Donald A. Gherardini, A. J. Pitchers, and Aaron P. Settles, to discuss the inspection findings, corrective actions, and the NRC enforcement options. The licensee assured the NRC that all future licensed activities will be conducted in full compliance with the regulations and the conditions of their license.

MID-STATES
logging & perforating

Axelson
file

July 18, 1984

Regional Administrator
USNRC Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Gentlemen:

In accordance with requirement of response to NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES, Mid-States hereby agrees that prior to corporate restructure and management reorganization, the radiation management and safety program was but vaguely adhered to. Mid-States agrees to pay the civil penalties levied in the amount of five hundred dollars and acknowledges that we do indeed understand the importance of this matter as we feel we have plainly demonstrated by our cooperation and assistance to the commission in its investigation.

In reference to the particular violations associated with this penalty as listed in the notice:

VIOLATION A. LICENSE CONDITION NO. 10

1. Mid-States agrees that condition was violated
2. Mid-States believes former manager responsible for this apparently intentional violation, as represented by falsified license posted and submitted to the commission at Enforcement Board Meeting.
3. Mid-States applied for and was granted amendment to condition No. 10.
4. Mid-States has reorganized its corporate structure as to disassociate itself with former manager Carl Hubbartt and his father, former President and Partner, Max Hubbartt and has employed new management and staff.
5. Full compliance was achieved June 14, 1984.

VIOLATION B CONDITION NO. 12

1. Mid-States agrees that condition No. 12 was violated
2. Mid-States believes former manager responsible as in any company, the manager decides who performs the jobs.
3. Mid-States applied for and was granted amendment to condition #12.

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4. Mid-States has employed new management and staff
5. Full compliance was achieved June 14, 1984.

VIOLATION C. CONDITION NO. 15

1. Mid-States agrees that condition No. 15 was violated.
2. Mid-States believes that, due to incompetent management practice during this period of time, proper inventories were not kept.
3. Mid-States ownership organization implementing strict inventory controls and procedures.
4. Mid-States employed new management and staff.
5. Full compliance was achieved on or immediately after inspection on April 30 thru May 2 when responsibility of additional source was verified and said source recovered.

VIOLATION D. CONDITION NO. 18

1. Mid-States agrees that condition No. 18 was violated.
2. Mid-States believes that due to incompetent management practice during this time, proper storage facilities were never achieved.
3. Implementation of a locked shielded controlled access room, for source storage was achieved before inspector left on May 2, and amendments applied for and granted by the commission
4. Close observation of storage procedure by the new management and staff.
5. Full compliance was achieved on June 14, 1984.

VIOLATION E. 10 CFR 20.203 (b)

1. Mid-States agrees 10CFR 20.203 (b) was violated.
2. Mid-States believes that incompetent management practices are responsible for the violation.
3. Mid-States now stores all sources inside a locked, shielded, controlled access room, posted according to our operating manual.
4. Mid-States has employed new management and staff.
5. Full compliance was achieved before inspector left Mid-States on May 2.

VIOLATION F. LICENSE CONDITION 18.

1. Mid-States agrees license condition 18 was violated.
2. Mid-States believes former manager responsible for violation because he fired Radiation Safety Officer and neglected to

MID-STATES
logging & perforating

(cont.)

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- ammend license or even replace the Radiation Safety Officer.
3. Mid-States has applied for and has been granted by the commission ammendments to license.
4. Mid-States has employed new management and staff.
5. Full compliance was achieved on June 14, 1984.

VIOLATION G. 10CFR 30.51 (a)

1. Mid-States agrees that CFR 30.51 (a) was violated .
2. Mid-States believes that former manager stole source and documentation for said source, for it was not on any inventory record. Furthermore, if not for diligent efforts by inspector Don Gibbons, disposition of said source and any documentation might not be known today.
3. Mid-States has contacted manufacturer of said source and requested and received copies of documentation.
4. Mid-States has seperated itself from former management and employed a new manager and staff.

VIOLATION H. 10CFR 71.5(a)

1. Mid-States agrees that 10 CFR 71.5(a) was violated.
2. Mid-States beleives former management responsible in that testimony by field employees to the fact that they were instructed by the manager not to fill out any more DOT utilization logs.
3. Mid-States has employed qualified field personnel and instructed them accordingly.
4. Mid-States has employed a new manager and staff.
5. Full compliance was achieved June 14, 1984.

VIOLATION I. LICENSE CONDITION 18.

1. Mid-States agrees that license condition 18 was violated.
2. Mid-States holds former manager responsible for violation in that testimony by field personnel that they were instructed by the manager himself not to perform such surveys which previously were the duty of the Radiation Safety Officer, whom the manager terminated in July, 1983, and that he himself would perform such surveys.
3. Mid-States has employed Radiation Safety Officers and instructed them accordingly.
4. Mid-States has employed a new manager and staff.
5. Full compliance was achieved June 14, 1984.

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logging & perforating

cont.

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VIOLATION J. LICENSE CONDITION 18

1. Mid-States agrees that license condition 18 was violated.
2. Mid-States believes former manager responsible in that testimony by field personnel that they were instructed by the manager himself not to maintain job log sheets after the manager fired the Radiation Safety Officer.
3. All of Mid-States' present staff has been instructed in the guidelines set forth in Appendix B, Section III of the operating manual.
4. Mid-States has employed a new manager and staff.
5. Full compliance was achieved on June 14, 1984.

Mid-States asks that the commission consider in its decision, the fact that the owners, A.J. and L.D. Pitcher were, prior to April, partners with Max Hubbartt, father of former manager, Carl Hubbartt, and that they had suspicions that since August, 1983, the company was in need of new management. Their decision to buy out their partner, Max Hubbartt, also at that time President of the corporation, and then install new management or controls, seemed to them the best avenue of reorganization.

The corporate restructure took place the first week of April and it wasn't until after the inspection on April 30th and resulting investigation into the records and files did they fully understand the extent of the mismanagement.

Furthermore, Mid-States strongly urges that the unresolved item of the stolen source, and who was responsible for this theft and the theft of documentation pertaining to said source, as well as logging tools, explosives, and miscellaneous equipment needed for operating a well logging business be investigated immediately, for due to the time already lapsed, Mid-States has suffered unfair publicity.

cont.

MID-STATES

logging & perforating

-5-

Mid-States also believes that due to the issuance of a materials license to the persons responsible for the gross mismanagement of our radiation program, as well as the theft of a source, that when all is resolved, it will be extremely embarrassing to anyone associated with this matter.

I hereby swear that, to the best of my knowledge, the above is true representation of the facts.

signed

Donald A. Gherardini

Donald A. Gherardini, manager
Mid-States Logging and Perforating Co.

Reviewed and approved by:

A.J. Pitcher, President

A.J. Pitcher

Witnessed by:

1. Ed. Bly

2. Thomas C. Haly



UNITED STATES NUCLEAR REGULATORY COMMISSION

OFFICE OF PUBLIC AFFAIRS, REGION III
799 Roosevelt Road, Glen Ellyn, Illinois 60137

NEWS ANNOUNCEMENT: 84-31
CONTACT: Jan Strasma 312/790-5674
Russ Marabito 312/790-5667

file

NRC STAFF PROPOSES \$500 FINE AGAINST ILLINOIS FIRM FOR ALLEGED VIOLATIONS OF NRC REQUIREMENTS

The Nuclear Regulatory Commission staff has proposed a \$500 fine against Mid-States Logging and Perforating Company of Fairfield, Illinois for alleged violations of NRC requirements in the shipping, handling, and storage of radioactive sources.

The company uses the sealed radioactive sources for surveys of gas and oil wells.

During an unannounced inspection April 30 to May 2, 1984, an NRC inspector determined that one of the licensee's radioactive well-logging sources was missing. The news media and Illinois State Police were notified. The missing source was found May 7 on the side of a road leading to the licensee's facility in Stanton, Kentucky. Circumstances surrounding the source's disappearance from Fairfield, Illinois and reappearance in Stanton, Kentucky are currently under investigation.

Following the NRC inspection in Fairfield, Mid-States was cited for 10 alleged violations of NRC requirements. These included: Storing licensed material at an unauthorized location; storing material in an improper storage area onsite; permitting unauthorized users to handle the material; failing to perform a physical inventory of the material every six months as required; failing to prepare shipping papers; and operating without an authorized Radiation Protection Officer.

James G. Keppler, the Region III Regional Administrator, said the alleged violations "collectively represent a breakdown in management oversight and control of the radiation safety program and demonstrate a clear need for improvement in the administration and control of the program."

Mid-States has until August 9, 1984, to either pay the fine or protest it. If the fine is protested and subsequently imposed formally by the NRC staff, the company may request a hearing.

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July 19, 1984

Enforcement Board Meeting Notes

Mid States Logging and Perforating Co.
103 W. Main Street
Olney, IL 62450
Mr. Donald A. Gherardini, Manager

NRC License No. 12-19985-01
authorizes sealed well
logging sources
Am-241 @ 5 Ci and CS-137 @ 2 Ci

Incident:

- 4/30/84 - Routine inspection - existing records indicated a sealed source, Am-241 (3 ci) was missing. Records indicated source received on 6/21/83. A leak test was recorded for that source on 11/11/83. An inventory on 4/13/84 did not account for the source, nor could it be located during the inspection.
- 5/1/84 - Licensee personnel notified state police and RIII that the subject source was missing.
- 5/2/84 - RIII inspector interviewed former employee and President and was informed that the former employee thought a source was missing when he left the company in March 1984.

Noncompliances:

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|---|-----|
| 1. Licensed material used and stored at unauthorized location
(License Condition No. 1 and 10) | IV |
| 2. Unauthorized users (License Condition No. 12) | IV |
| 3. Physical inventories were not performed at 6 month intervals
(License Condition No. 15) | IV |
| 4. Improper source storage area (License Condition No. 18, Appendix B, Section i(a)). | IV |
| 5. No "Radiation Area" postings (10CFR20.203(b) and License Condition No. 18, Appendix B, Section I(a)(3)). | IV |
| 6. Missing (lost or stolen) sealed source (10CFR20.207) | III |
| 7. No authorized radiation protection office or radiation protection officer (License Condition No. 18; Appendix A, I and II) | IV |
| 8. Insufficient records of receiving and transfer of sealed sources
(10CFR30.51) | IV |
| 9. No shipping/transfer papers (49CFR172.200) | III |

- | | |
|---|----|
| 10. No monthly vehicle surveys or quarterly storage area surveys completed (License Condition No. 18, Appendix A, VI, e, and f.). | IV |
| 11. Job log sheets were not maintained since 8/27/83 (License Condition No. 18 referenced in Appendix B, Section III). | IV |
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Recommendations:

Enforcement Meeting

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

12-19985-01

Docket or Reference number

Amendment No. 02

Mid-States Logging and Perforating Co.
Rt. 45 N., Box 39
Fairfield, IL 62837

In accordance with letter dated June 16, 1984, License Number 12-19985-01 is amended as follows:

Condition 12. is amended to read:

12. Licensed material listed in Item 6 above is authorized for use by, or under the supervision and in the physical presence of, the following individual(s) for the materials and uses indicated:

Aaron P. Settles	Americium-241, cesium-137, iodine-131, iridium-192
Donald A. Gherardini	Americium-241, cesium-137, iodine-131, iridium-192
Ed Beyers	Americium-241, cesium-137, iodine-131, iridium-192
Tony A. Keylon	Americium-241, cesium-137, iodine-131, iridium-192
Steven C. Daley	Americium-241, cesium-137
William S. Vandever	Americium-241, cesium-137
Carroll R. Wiles	Americium-241, cesium-137

For the U.S. Nuclear Regulatory Commission

Date July 19, 1984

Original Signed
By Patricia J. Whiston
Materials Licensing Section, Region III

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