

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  MS Sedco, Inc 8701 Castle Park Drive Indianapolis, Indiana 46256  REPORT NUMBER(S) 12-01		2. NRC/REGIONAL OFFICE  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Liste, IL 60532-4352
3. DOCKET NUMBER(S)  030-32045, 030-32046	4. LICENSE NUMBER(S)  13-26301-01, 13-26301-02E	5. DATE(S) OF INSPECTION  May 11, 2012

**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 inspection findings are as follows:

1. Based on the inspection findings, no violations were identified.
2. Previous violation(s) closed.
3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

Non-cited violation(s) were discussed involving the following requirement(s):

- ✓ 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

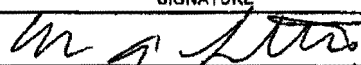


Based on the results of this inspection, two Severity Level IV violations were identified. The violations are being cited because they were identified by the NRC inspector:

A. Condition 12 of NRC License no. 13-26301-02E states that the licensee shall file periodic reports as specified in Title 10 of the Code of Federal Regulations (CFR) 32.16.

Title 10 CFR 32.16 states, in part, that each person licensed under § 32.14 shall maintain records of all transfers of byproduct material and file a report with the Director of the Office of Federal and State Materials and Environmental Management Programs by an appropriate method listed in § 30.6(a), and that the licensee shall file the report, covering the preceding calendar year, on or before January 31 of each year. (continued in Part 2)

**Statement of Corrective Actions**

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE	DATE
LICENSEE'S REPRESENTATIVE	Mark Stults		6/6/12
NRC INSPECTOR	Andrew M. Bramnik		5/29/12
BRANCH CHIEF	Hironori Peterson		6/13/12

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(Continued)

Contrary to the above, between January 31, 2009 and May 11, 2012, the licensee did not file reports with the Director of the Office of Federal and State Materials and Environmental Management Programs as required by 10 CFR 32.16. Specifically, as of May 11, 2012, the licensee did not submit reports covering the calendar years 2008, 2009, 2010, and 2011.

The root cause of the violation was the licensee's lack of awareness of the requirement in 10 CFR 32.16. A contributing cause of the violation was an inadequate turnover of management responsibilities from the previous Radiation Safety Officer (RSO) to the current RSO. As corrective actions, the licensee will complete and submit reports to the NRC for calendar years 2008, 2009, 2010, and 2011. As long term corrective actions, the licensee will develop a procedure for completing the annual reports, and will create a recurring calendar appointment in the company e-mail program. These actions will be completed by May 31, 2012.

This is a Severity Level IV Violation (Section 6.3)

B. Title 10 CFR 20.1101(c) states that the licensee shall periodically (at least annually) review the radiation protection program content and implementation.

Contrary to the above, between December 31, 2007 and May 11, 2012, the licensee failed to periodically review the radiation protection program content and implementation. Specifically, the licensee had not reviewed or updated its procedures for ordering and receiving sources of americium-241, leak testing sources of americium-241, or operating procedures with specific focus on the ALARA principal.

The root cause of the violation was the licensee's lack of awareness of the requirement in 10 CFR 20.1101. A contributing cause of the violation was an inadequate turnover of management responsibilities from the previous RSO to the current RSO. As corrective actions, the licensee will develop an audit program using the guidance in NUREG-1556 volumes 8 and 12, and conduct a program audit before June 29, 2012. As long term corrective actions, the licensee will develop, implement, and maintain an annual audit program, and will create a recurring calendar appointment in the company e-mail program. These actions will be completed by June 29, 2012.

This is a Severity Level IV Violation (Section 6.3)

**Docket File Information**  
**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

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MS Sedco, Inc  
8701 Castle Park Drive  
Indianapolis, Indiana 46256

REPORT NUMBER(S) 12-01

2. NRC/REGIONAL OFFICE

Region III  
U. S. Nuclear Regulatory Commission  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-32045, 030-32046

4. LICENSE NUMBER(S)

13-26301-01, 13-26301-02E

5. DATE(S) OF INSPECTION

May 11, 2012

6. INSPECTION PROCEDURES USED

87125

7. INSPECTION FOCUS AREAS

03.01 - 03.07

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S)

03214, 03255

2. PRIORITY

5

3. LICENSEE CONTACT

Mark A. Stults, Vice President & RSO

4. TELEPHONE NUMBER

(317) 849-3387

☒ Main Office Inspection

Next Inspection Date: 05/01/2017

☐ Field Office Inspection

☐ Temporary Job Site Inspection

**PROGRAM SCOPE**

This was a routine inspection of a licensee that imported sealed sources containing less than one microcurie each of americium-241, installed the sources in smoke detectors, and then sold and distributed the products as exempt from NRC or Agreement State regulations. The licensee's products used ionization smoke detectors to automatically close fire doors in commercial buildings. The licensee assembled its smoke detectors under the possession license no. 13-26301-01 and distributed them as "exempt devices" under the exempt distribution license no. 13-26301-02E. The licensee employed 19 individuals in total, but only 3 individuals were involved in the licensee's operations with byproduct material: a production worker, a production manager, and the RSO.

**PERFORMANCE OBSERVATIONS**

Interviews with the licensee's staff and management revealed an adequate level of understanding of emergency and material handling procedures and techniques. The licensee's production worker and RSO demonstrated how shipments of americium-241 sources are received, stored, installed, packaged, and distributed. The licensee had not received a shipment of sources since February 2009. All orders were reviewed by the RSO to ensure that the maximum possession limit was not exceeded.

The licensee's RSO also demonstrated how area wipe tests were conducted to survey for removable contamination. The individual adequately surveyed the shipping and production areas for contamination, and checked surveys using a Ludlum Model no. 43-10 counter that was calibrated annually. The inspector confirmed that these activities were successfully completed by reviewing selected records since the previous inspection.

Licensed material was adequately secured and not readily accessible to members of the general public. Personal whole body and extremity dosimetry badges were not required to be worn by the licensee's staff members. Licensee staff members received training that was adequate to familiarize them with radioactive material and the ALARA principle.

Two Severity Level IV violations were identified during this inspection, and are described in greater detail in Parts 1 and 2 of this inspection report.