

## INSPECTION RECORD

**Region III Inspection Report No.** 2010-001  
**License No.** 24-26620-01      **Docket No.** 030-33719

**Licensee (Name and Address):**

Shively Geotechnical  
A Division of Environmental Operations, Inc.  
1530 South Second Street, Suite 200  
St. Louis, Missouri 63104

**Licensee Contact:** Bill Witts, Vice President    **Telephone No.** 314-480-4644

**Priority:** 5      **Program Code:** 3121

**Date of Last Inspection:**      **Date of This Inspection:**

**Type of Inspection:**    ( ) Initial    (X) Announced    ( ) Unannounced  
                                  ( ) Routine    (X) Special

**Next Inspection Date:** 9/2011    ( ) Normal    ( ) Reduced

**Justification for reducing the routine inspection interval:**


This was a special inspection to review a specific portion of the licensee's program. No change in inspection date is necessary as a result of this time.

**Summary of Findings and Actions:**

- ( ) No violations cited, clear U.S. Nuclear Regulatory Commission (NRC) Form 591 or regional letter issued
- ( ) Non-cited violations (NCVs)
- ( ) Violation(s), Form 591 issued
- (X) Finding(s), regional letter issued
- ( ) Followup on previous violations

Inspector  \_\_\_\_\_  
Michael LaFranzo - Health Physicist

Date 9/2/10

Approved  \_\_\_\_\_  
Tamara E. Bloomer, Chief, MIB

Date 9/3/10

## PART I-LICENSE, INSPECTION, INCIDENT/EVENT, AND ENFORCEMENT HISTORY

### 1. AMENDMENTS AND PROGRAM CHANGES:

<u>Amendment No.</u>	<u>Date</u>	<u>Subject</u>
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NA – This was a special inspection to review circumstances surrounding a device containing Co-57. The next routine inspection will address program changes.

### 2. INSPECTION AND ENFORCEMENT HISTORY:

During a routine NRC inspection on September 21-26, 2006, a single violation of NRC requirements was identified regarding 10 CFR 30.34(i) and was categorized at a Severity Level IV. An inspection on August 20, 2001 did not identify any violations of NRC requirements.

### 3. INCIDENT/EVENT HISTORY:

None

## **PART II - INSPECTION DOCUMENTATION**

### **1. ORGANIZATION AND SCOPE OF PROGRAM:**

The licensee was a civil engineering company that performed soil and asphalt density testing at road and construction sites in Missouri and Illinois. This special inspection was prompted by a telephonic call from the State of Illinois. The Illinois representative informed the NRC that the licensee may have possessed a RMD Instruments, LLC lead analyzing device containing a nominal 12 millicuries of Co-57. The special inspection was conducted to determine if the licensee had such a source within NRC jurisdiction.

The Radiation Safety Officer, John E. Shively, is also the President of the company. Regarding the lead analyzer, they have two individuals that are trained to use the device that report directly to Vice President, Bill Witts, who reports to the Mr. Shively. The device is used 4-5 times per year on an as-needed basis.

### **2. SCOPE OF INSPECTION:**

(Identify the inspection procedure(s) used and focus areas evaluated. If records were reviewed, indicate the type of record and time periods reviewed)

Inspection Procedure(s) Used: 87124

Focus Areas Evaluated: 03.01-03.07 related to the use and storage of the Co-57 source.

### **3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:**

The inspector performed radiation measurements around the device and did not identify any abnormal radiation levels. At the time of the inspection, the licensee did not possess a radiation detector at the location to perform a side-by-side comparison measurement,

#### 4. **VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:**

A special inspection was conducted to determine if the licensee had possession of a device containing a nominal 12 millicuries of Co-57 which was not authorized on the NRC license. The special inspection was prompted by a telephonic call from the State of Illinois.

The Energy Policy Act of 2005 (EPAcT) expanded the definition of byproduct material to include naturally occurring and accelerator-produced radioactive materials (NARM) and placed the material under the U. S. Nuclear Regulatory Commission's (NRC) jurisdiction. In accordance with the EPAcT, the NRC issued a waiver on August 31, 2005, allowing the continued use and possession of NARM while the NRC developed a regulatory framework for the regulation of the new byproduct material. On October 1, 2007, the NRC published a Federal Register Notice informing licensees of amendments to the NRC's regulation regarding the possession and use of NARM. On March 12, 2008, the NRC published a Federal Register Notice that provided advance notification that on September 30, 2008, the Commission will terminate the time-limited waivers for several non-agreement states, including the State of Missouri. It also stated, in part, that users of NARM in Missouri will be required to submit a license amendment for the new byproduct material within 6 months from the date the waiver is terminated, that is March 30, 2009.

Based on the above, the NRC had determined that a violation of NRC requirements occurred. Specifically, Shively Geotechnical possessed a cobalt-57 source containing a nominal activity of 12 millicuries in a device and had not requested an NRC license to possess and use the material prior to July 29, 2010, about 16 months after the March 30, 2009, deadline. The violation occurred because Shively Geotechnical's senior management was not aware that the company possessed the cobalt-57 source until July 2010. The licensee committed to submit an amendment to the licensee within 30 days of the telephonic exit meeting.

The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site <http://www.nrc.gov/aboutnrc/regulatory/enforcement/enforce-pol.html>. The possession of this type and quantity of radioactive material not authorized on an NRC license is normally characterized as a Severity Level IV violation in accordance with the NRC Enforcement Policy. Notwithstanding 10 CFR 30.3(c)(3), it is recognized that some entities may not have been aware of the new regulatory requirements or did not recognize that they possessed such regulated radioactive material. After considering the information developed during the special inspection, the NRC determined that enforcement discretion, in accordance with Enforcement Guidance Memorandum 09-004, was warranted and did not issue a violation for failure to submit an amendment to the NRC license on or before March 30, 2009, to authorize NARM activities.

5. **PERSONNEL CONTACTED:**

\*#& John E. Shively – President  
\*#& William Witts – Vice President  
Joshua Craig - Technician

Use the following identification symbols:

# Individual(s) present at entrance meeting

\* Individual(s) present at preliminary site exit meeting

& Individual(s) present telephonic exit meeting on August 4, 2010

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