

INSPECTION RECORD

Region III Inspection Report No. 030-38285/11-01

License No. 21-32794-01
Docket No. 030-38285

Licensee :
O'Banion Laboratories Corporation
P.O. Box 416
Trenton, Michigan 49930

Licensee Contact: Douglas O'Banion
President and RSO
Telephone No. 734-363-4873

Priority: 5 Program Code: 3121

Date of Last Inspection: N/A Date of This Inspection: 3/22/2011 with continued in-office review until 4/1/11 to evaluate transporting an asphalt content gauge with a sealed source not certified as Special Form

Location of Inspection: 20090 West Road, Woodhaven, Michigan (White Castle parking lot)

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

Next Inspection Date: 3/2016 (X) Normal () Reduced

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) Violation(s), regional letter issued
- () Followup on previous violations

Inspector: Andrew M. Bramnik
Andrew M. Bramnik, Health Physicist

Date: April 8, 2011

Approved: Tamara E. Bloomer
Tamara E. Bloomer, Chief,
Materials Inspection Branch

Date: 4/8/11

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

1. AMENDMENTS AND PROGRAM CHANGES:

<u>Amendment No.</u>	<u>Date</u>	<u>Subject</u>
0	7/12/2010	New License Issued

2. INSPECTION AND ENFORCEMENT HISTORY:

As this was an initial inspection of the licensee, no inspection or enforcement history exists.

3. INCIDENT/EVENT HISTORY:

None

PART II - INSPECTION DOCUMENTATION

1. ORGANIZATION AND SCOPE OF PROGRAM:

Douglas O'Banion – President, Radiation Safety Officer (RSO), and gauge operator.

The licensee operated a portable moisture/density gauge program in Trenton, Michigan. At the time of the inspection, the licensee possessed one Troxler model no. 3421 asphalt content gauge, containing a sealed source of americium-241:berrilium. The licensee had purchased this gauge from a State of Illinois licensee and took possession of it on August 12, 2010.

While scheduling the initial inspection, the licensee stated that he no longer had access to the Brownstown, Michigan address listed in condition 10 of his NRC license because his lease had expired in November 2010. The licensee stated that between October 2010 and March 20, 2011, he stored his gauge at a temporary job site in Gambier, Ohio. The licensee had retrieved his gauge on March 20, 2011, and transported it to Woodhaven, Michigan for the initial NRC inspection on March 22, 2011.

2. SCOPE OF INSPECTION:

Inspection Procedure(s) Used: 87124
Focus Areas Evaluated: Sections 03.01 through 03.07

Because the licensee did not have access to the permanent storage facility listed on its license, and at the licensee's request, the inspector met the licensee to perform the initial inspection at the parking lot of a White Castle restaurant in Woodhaven, Michigan. In an April 1, 2011 telephone exit meeting, the licensee committed to submit a license amendment request for a new permanent storage location to be added to his license by April 30, 2011.

Throughout the onsite inspection the inspector observed that, although the licensee did not secure his gauge with two independent physical controls that formed tangible

barriers to secure the portable gauge from unauthorized removal, the licensee did maintain control and constant surveillance of the gauge. The licensee was familiar with the two barrier rule for when the gauge was in storage, and stated that the gauge was secured using the appropriate controls when stored at a temporary job site in Gambier, Ohio. The inspector informed the licensee that the two barrier rule applied at all times when the licensee did not maintain control and constant surveillance of the gauge, including during permanent storage, transport, and storage at temporary job sites. To ensure compliance with the rule, the licensee stated that he would install eye-bolts in his SUV to secure gauges using chains or other fasteners when being transported. The inspection also included an interview with the licensee and a records review.

During the interview, the licensee demonstrated an adequate level of understanding of emergency and material handling procedures and techniques. The licensee had conducted a physical inventory within six months of taking possession of the gauge. The licensee showed the inspector copies of required shipping papers and emergency procedures, and was familiar with the content of both documents. The inspector identified that an incorrect identification number was listed on both the package marking and shipping papers. This item is described in greater detail in Section 4, below.

During the records review, the most recent leak test record the licensee could produce was dated June 2, 1997. The licensee stated that the seller had conducted a leak test prior to shipping the gauge, but that he did not have the records of this test. A day after the onsite inspection, on March 23, 2011, the licensee contacted the inspector via cell phone. The licensee stated that he had received an e-mail from the seller with a leak test record dated August 16, 2010, showing no removable contamination exceeding 0.005 microCuries. However, the e-mail from the seller also contained a letter from Troxler Electronic Laboratories dated August 16, 2010, stating that the sealed source inside the gauge was no longer certified as special form material and may only be shipped one-time for source disposal under special permit DOT-SP 14287. Upon receipt of this information, the licensee immediately contacted Troxler to arrange for the gauge to be shipped to the manufacturer in accordance with the special permit. The licensee expects to ship the gauge to Troxler by April 30, 2011, at which point he will not possess any radioactive materials. The licensee stated his intent to purchase additional asphalt content and portable moisture/density gauges in the near future, and did not indicate a desire to terminate his NRC license.

Additionally, the licensee told the inspector that he had not filed for reciprocity nor obtained a license from the State of Ohio before using licensed materials in Ohio. The inspector informed the licensee that he needed to either file for reciprocity from the State of Ohio or obtain an Ohio license before storing or using radioactive materials in that state. The Region III State Agreements Officer contacted Steve James from the State of Ohio, who stated that they would not pursue a citation against the licensee. On April 1, 2011, the inspector sent the licensee an e-mail with contact information for the Radiation Protection program at the Ohio Department of Health.

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

Independent measurements taken did not indicate readings in excess of limits in Title 10 of the Code of Federal Regulations (CFR) Part 20 in any unrestricted areas. The licensee did not possess personal whole body dosimetry because he had not begun

using the gauge for any principal operations. The licensee showed the inspector forms that he had completed and sent to Troxler on March 18, 2011, for personnel monitoring dosimetry.

Item 10.2 "Radiation Detection Instruments" of the licensee's Application dated April 5, 2010, states, in part, that the licensee will maintain a survey meter for use in the event of an incident involving the gauge. Contrary to the above, the licensee did not maintain or possess a survey meter for use, but was familiar with where to get one if needed during an emergency. Specifically, the licensee possessed a gauge containing a sealed source of americium-241:berrilium for seven months and failed to possess a survey meter. The licensee believed that because his asphalt content gauge had not been used, a survey meter was not required. Prior to the inspection, the licensee had ordered a survey meter from Troxler Electronic Laboratories. On April 1, 2011, the licensee informed the NRC that the survey meter had arrived and that he was now in compliance regarding this item. Because this violation represented an isolated failure to implement a requirement with insignificant safety impact, this failure constitutes a violation of minor significance and is not subject to formal enforcement action.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

Title 10 CFR Section 71.5(a) requires that a licensee who transports licensed material outside of the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in Title 49 of the Code of Federal Regulation (49 CFR) Parts 107, 171-180, and 390-397. Pursuant to 49 CFR 172.101, radioactive material is classified as hazardous material.

Title 49 CFR 172.301 requires that each person who offers a hazardous material for transportation in a non-bulk packaging must mark the package with the proper shipping name and identification number (preceded by "UN" or "NA" as appropriate) for the material as shown in the 49 CFR 172.101 Table.

Title 49 CFR 172.202(a) and (b) require in part, with exceptions not applicable here, that the shipping description of a hazardous material on the shipping paper include, in the following sequence: (1) the proper shipping name prescribed for the material in 172.101 (2) the hazard class prescribed for the material as shown in Column 3 of the 172.101 Table, and (3) the identification number prescribed for the material as shown in Column 4 of the 49 CFR 172.101 Table

Contrary to the above, on March 22, 2011, the licensee transported outside the confines of its plant an asphalt content gauging device containing a sealed source of americium-241:berrilium and failed to comply with the DOT requirements for transporting hazardous materials contained in 49 CFR, with two examples:

- a. The licensee failed to mark the package with the proper identification number. Specifically, the licensee transported the device in a package marked with the identification number UN 2974, instead of the correct identification number UN 3332; and,

- b. The shipping description on the shipping paper that accompanied the shipment did not include the correct identification number. Specifically, the shipping description listed the identification number UN 2974, instead of the correct identification number UN 3332.

The root cause of this violation was a lack of awareness of the requirements in 49 CFR for marking packages containing radioactive materials. Specifically, the licensee was not aware that the correct identification number for asphalt content gauges containing sealed sources of americium-241:berrilium was UN 3332, instead of UN 2974.

As corrective actions, on March 23, 2011, the licensee contacted Troxler to order a new marking sticker with the correct identification number. This action was also required in order for the licensee to ship the gauge to Troxler for disposal in accordance with the special permit. The licensee also revised their shipping papers to include the correct identification number. These actions will be completed by April 30, 2011.

5. **PERSONNEL CONTACTED:**

*# Douglas O'Banion, President and RSO

Use the following identification symbols:

* Individual(s) present at March 22, 2011 preliminary on-site exit meeting

Individual(s) present at April 1, 2011, telephone exit meeting

-END-