

## INSPECTION RECORD

Region III Inspection Report No. 2007-001 License No. 24-32339-01  
Docket No. 030-35805

**Licensee (Name and Address):**

Donald Danforth Plant Science Center  
975 North Warson Road  
St. Louis, Missouri 63132

**Location (Authorized Site) Being Inspected**

975 North Warson Road; St. Louis, Missouri 63132

Licensee Contact: Howard Beittenmiller - RSO Telephone No. 314-587-1051

Priority: 5 Program Code: 3620

Date of Last Inspection: May 3, 2002 Date of This Inspection: July 18, 2007

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

Next Inspection Date: July 2012 (X) Normal ( ) Reduced

Justification for reducing the routine inspection interval:

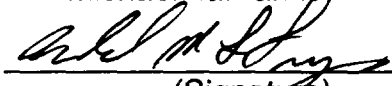
NA

**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

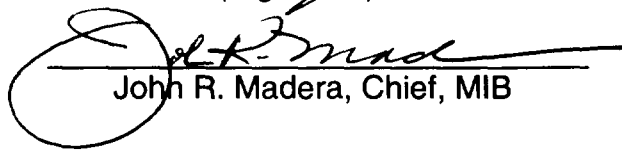
Inspector(s) \_\_\_\_\_

Michael LaFranzo

  
(Signature)

Date 8/8/07

Approved

  
John R. Madera, Chief, MIB  
(Signature)

Date 8/9/07

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

### 1. AMENDMENTS AND PROGRAM CHANGES:

(License amendments issued since last inspection, or program changes noted in the license)

<u>AMENDMENT #</u>	<u>DATE</u>	<u>SUBJECT</u>
1	6/24/2002	Addition of Principal Investigators
2	10/2/2003	Addition/Removal Principal Investigators
3	9/8/2004	Addition of nuclide possession and limits
4	8/1/2005	Addition of Principal Investigators
5	2/8/2006	Change in nuclide possession and limits
6	4/30/2007	Addition/Removal Principal Investigators

### 2. INSPECTION AND ENFORCEMENT HISTORY:

(Unresolved issues; previous and repeat violations; Confirmatory Action Letters; and orders)

The licensee has had one previous safety inspection on 5/2-3/2002; no violations of NRC requirements were identified. The licensee had not been issued confirmatory action letters or orders since the last inspection.

### 3. INCIDENT/EVENT HISTORY:

(List any incidents, or events reported to NRC since the last inspection. Citing "None" indicates that regional event logs, event files, and the licensing file have no evidence of any incidents or events since the last inspection.)

None

## **PART II - INSPECTION DOCUMENTATION**

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

(Management organizational structure; authorized locations of use, including field offices and temporary job sites; type, quantity, and frequency of material use; staff size; delegation of authority)

President  
COO  
Radiation Safety Officer

The licensee is authorized to use licensed material at the 975 North Warson Road facility in St. Louis, Missouri. The licensee currently has 18 principal investigators but only 4-5 principal investigators use licensed material at anyone time. The licensee primarily uses tritium and carbon-14 in sub-microcuries quantities. The radiation safety office consists of one radiation safety officer and a senior technician. A radiation safety committee meets at least twice a year to discuss radiation safety issues.

### **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: 87110

Focus Areas Evaluated: 3.1-3.7

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

(Areas surveyed, both restricted and unrestricted, and measurements made; comparison of data with licensee's results and regulations)

The inspector performed radiological surveys of restricted and unrestricted areas in and around the numerous laboratories where licensed material was used or stored. No radiological contamination was identified.

The inspector made comparison measurements between NRC and licensee radiation measurement instruments and found that they were within +/- 20%.

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

(State the requirement, how and when the licensee violated the requirement, and the licensee's proposed corrective action plan. For NCVs, indicate why the violation was not cited. Attach copies of all licensee documents needed to support violations.)

During the inspection, the NRC identified one violation of NRC requirements.

On June 15, 2005 and June 16, 2005, a principal investigator working at the licensee's facility transported radioactive material from the licensee's facility to the University of Missouri, St Louis (UMSL) facility. The principal investigator was working as a researcher at both the licensee's facility and the UMSL facility (License No. 24-00513-38). On June 15, 2005, at the direction of the principal

investigator, a technician transported approximately 10 microcuries of tritium and one microcurie of carbon-14 from the licensee's facility to UMSL via a personal vehicle. On June 16, 2005, the technician transported approximately 20 microcuries of tritium via a personal vehicle. According to the principal investigator, she or the technician did not know that shipping papers were required for such a transfer. The transfers occurred because the principal investigator decided that she required the radioactive material at the UMSL facility and, without the knowledge of the radiation safety officer, transferred the material to UMSL on two occasions. The licensee was made aware of the transfers on October 11, 2006 and initiated an investigation. As corrective actions, the licensee counseled the principal investigator, increased inspection frequencies of the principal investigator's laboratories, performed a physical inventory of all licensed material under the control of the principal investigator and retrained all licensee staff on the proper procedures for transferring licensed material outside the confines of the facility.

This violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the Enforcement Policy.

**5. PERSONNEL CONTACTED:**

Use the following identification symbols:

- # Individual(s) present at entrance meeting
- \* Individual(s) present at exit meeting

- Dr. Savatore Fiorello - COO
- #\* Howard Beittenmiller - RSO

-END-