

Philotechnics
app'd 10/28/08

NRC FORM 591M PART 1
(10-2003) 10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Philotechnics, Ltd. 11542 Fort Mims Drive St. Louis, MO 63178		2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region III 2443 Warrenville Road Suite 210 Lisle, Illinois 60532-4351	
REPORT NUMBER(S) 2008-004			

3. DOCKET NUMBER(S) 150-00020	4. LICENSEE NUMBER(S) MA56-0543	5. DATE(S) OF INSPECTION 10/22-23/08
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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, NUREG-1600, to exercise discretion, were satisfied.

Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(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. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

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			

NRC INSPECTOR	George M. McCann	<i>George M. McCann</i>	October 28, 2008
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NRC FORM 591M PART 3

(10-2003) 10 CFR 2.201

Docket File Information

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1 LICENSEE Philotechnics, LTD.		2 NRC/REGIONAL OFFICE Region III 2443 Warrenville Road, Suite 210 Lisle, IL 60532	
REPORT NUMBER(S) 2008-004			
3 DOCKET NUMBER(S) 150-00020	4. LICENSE NUMBER(S) MA56-0543	5. DATE(S) OF INSPECTION 10/22-24/08	
6 INSPECTION PROCEDURES USED 87104		7. INSPECTION FOCUS AREAS 03.01-03.07	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 03610	2. PRIORITY 3	3. LICENSEE CONTACT Ryan Fahey	4. TELEPHONE NUMBER 978-844-4560
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Main Office Inspection

Next Inspection Date: 12/08 or 01/09

Field Office _____

Temporary Job Site Inspection Sigma-Aldrich Company, 11542 Fort Mims Drive, Maryland Heights, Missouri

PROGRAM SCOPE

This was a Region III initial start-up decommissioning inspection. Philotechnics is licensed by the State of Massachusetts to perform service activities at other Agreement State and NRC licensed sites. Philotechnics is authorized pursuant to License Item 9.4. "Authorized Used," to conduct the following activities at client sites, "Possession, processing, decontamination, storage, packaging, shipping, transfer, characterization and radiological surveys as part of assessment, decontamination, decommissioning and/or remediation operations." This inspection was conducted at the former byproduct material production facility located at 11542 Fort Mims Drive, Maryland Heights, Missouri, which is owned by the Sigma-Aldrich Company, NRC License No. 24-16273-01, and Docket No. 030-10716.

Sigma's radioactive materials usage at the Ft. Mims site consisted of research and development activities as defined in 10 CFR 30.4, and storage, processing and use in the production of labeled compounds for distribution to authorized customers. Radioactive materials were used in specific areas of the building since 1975. Production activities ceased at the facility on September 30, 2008. Carbon-14 and Hydrogen-3 are the radioactive materials significant to NRC decommissioning requirements. The production facility consists of a two-story building of approximately 20,000 square feet. The building is constructed on a concrete slab. The building exterior walls are a combination of cinder block, sheet metal and wood. The building roof is sheet metal and foam. The facility is located on approximately a one-acre parcel in a commercial/light industrial park.

Sigma contracted with Philotechnics to perform decommissioning activities including characterization, remediation, final status surveys and development of a final report. It is projected that decommissioning of the facility will take approximately 3 to 4 months. The goal is to remediate the facility to below the NRC screening values. Carbon-14 and hydrogen-3 contamination is primarily limited to building interior, with spotty carbon-14 and hydrogen-3 contamination in soils near the building exhaust stack. Sigma-Aldrich will submit a decommissioning plan to the NRC by the first of November 2008. The Philotechnics and Sigma-Aldrich Company committed to the NRC to limit Philotechnics decommissioning activities to simple decontamination, waste packaging, and activities, which won't conflict with the DP process.

Performance Observations

The NRC inspector toured the production facility, observing the service contractor's activities. The service contractor management and staff were interviewed. The inspector also evaluated compliance with "Sigma-Aldrich, Fort Mims Facility, Maryland Heights, MO, Decontamination and Decommissioning Plan (D&D Plan), dated October 20, 2008, which was provided to the NRC pursuant to Condition 11.B. of the licensee's Massachusetts license." Section 6 of the D&D Plan indicates, in general that all D&D activities will be conducted using Philotechnics Health Physics Operations Procedures. The inspector participated in the morning plan of the day meeting, reviewed records of employee training, radiological survey instrument calibration, bioassay, daily radiation surveys, and air sampling data. The inspector observed and evaluated facility and materials security, access control, and posting. The inspector observed personnel donning and removing personnel protective clothing. Inspection activities included evaluation of the conduct of radiation contamination surveys and conduct of the licensee's air sampling program. The inspector performed independent radiological surveys on licensee personnel and in unrestricted areas of the facility.

No violations of NRC requirements were identified