

January 13, 2015

Ora C. Rawls, Ph.D., Security Manager/Export Control Officer Research Security and Export Control Jackson State University 1230 Raymond Road Jackson, Mississippi 39204

Dear Dr. Rawls:

This letter serves as "Official Notice of Inspection Findings" concerning an inspection of the activities authorized under Radioactive Material License No. MS-867-01 and Registration No. X-148. The inspection was conducted January 9, 2015 by Brielle Grantham.

During the inspection, six (6) items of noncompliance were identified that require immediate attention. Three of these items of non compliance were cited in previous inspections and have been classified as recurrent violations.

- 1. Condition No. 14 of Radioactive Material License No. MS-867-01 states, in part, that the licensee shall test each sealed and/or foil source for leakage or contamination at intervals not to exceed six (6) months or at alternative intervals approved by the Agency, an Agreement State, or the U. S. Nuclear Regulatory Commission.
 - Contrary to the above, tests for leakage or contamination of the foil sources for the Hewlett Packard Model 5890 Gas Chromatograph serial number K0326, have not been performed at the required six (6) month intervals. Failure to perform leak tests at six (6) month intervals was cited during the previous inspection conducted on March 11, 2010, therefore, this item is classified as a recurrent violation.
- 2. Condition No. 16 of Radioactive Material License No. MS-867-01 states, in part, that the licensee shall conduct a physical inventory every six (6) months to account for all foils and sealed sources received and possessed under the license. The records shall be maintained for three (3) years from the date of the inventory for inspection by the Division of Radiological Health.

Contrary to the above, physical inventories of foils and sealed sources have not been performed at the required six (6) month intervals and records are not maintained. Failure to conduct inventories at six (6) month intervals and maintain records was cited during the previous two

inspections conducted on September 11, 2003 and March 11, 2010, therefore, this item is classified as a recurrent violation.

- 3. Rule 1.4.17(2) of the Mississippi State Board of Health Regulations for Control of Radiation states, in part, that a licensee shall ensure that instruments and equipment used for quantitative radiation measurements are calibrated at intervals not to exceed twelve (12) months.
 - Contrary to the above, Jackson State University failed to calibrate survey meters at required twelve (12) month intervals. Failure to perform survey meter calibrations at twelve (12) month intervals was cited during the previous inspection conducted on March 11, 2010, therefore, this item is classified as a **recurrent violation**.
- 4. Condition No. 11 of the Application for Radioactive Material License No. MS-867-01 states in part, the licensee shall exchange personnel monitoring devices monthly.
 - Rule 1.10.4 of the Mississippi State Board of Health Regulations for Control of Radiation states, in part, that the licensee shall provide radiation exposure data for an individual in which monitoring is required.
 - Contrary to the above, personnel monitoring devices were not exchanged at the monthly frequency. Also, contrary to the above, annual notification of occupational doses was not provided to employees for 2010, 2011, 2012 and 2013. For the years 2012 and 2013 no dosimetry was reported. This item is classified as a **violation**.
- 5. Rule 1.4.51 of the Mississippi State Board of Health Regulations for Control of Radiation states, in part, that the licensee shall maintain records of the disposal of licensed materials.
 - Contrary to the above, there are no records of surveys conducted or contents of waste collected as decay-in-storage for waste being held in the Research Lab, Room 447. This item is classified as a **violation**.
- 6. Rule 1.4.43 of the Mississippi State Board of Health Regulations for Control of Radiation states, in part, that the licensee shall retain all records until the agency terminates each pertinent license requiring the record.
 - Contrary to the above, records of receipt of licensed materials, surveys conducted in laboratories where radioactive materials are used and results of contamination wipes were not maintained. Failure to maintain records for receipt of radioactive materials was cited during the previous inspection conducted on March 11, 2010, therefore, this item is classified as a **recurrent violation**.

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In addition to the above, the following comments are made:

- 1. A copy of the survey meter calibration certificate must be submitted with your response.
- 2. Current leak test for the Nickel-63 foil contained in the Hewlett Packard Model 5890, serial number K0326, must be submitted with your response.
- 3. Licensing action is needed to change Item 8.I. for the use of the Shimadzu GC-17A Gas Chromatograph, serial number 626581 to "for storage only."

Due to the number of health and safety violations cited, a re-inspection will be conducted. It appears that the corrective actions for the items of noncompliance cited during the previous inspections were not implemented. Management has failed to ensure that the stated corrective actions were implemented by university's personnel. Failure to fully comply with conditions of the radioactive material license and the Mississippi State Board of Health Regulations may result in suspension of licensed activities.

Please respond to the above cited items within thirty (30) days of your receipt of this Notice. In your response, state the corrective actions that have been taken and the date when full compliance is achieved. Should you disagree that violations occurred, describe the circumstance(s) and produce records substantiating such claim.

Rule 1.10.2(4) of the Mississippi State Board of Health Regulations for Control of Radiation requires this letter and your response to be posted for a period of five (5) working days or until corrective action is completed, whichever is later.

Should you have any questions or comments concerning this "Notice" or inspection, please contact Brielle Grantham at (601) 987-6893.

Sincerely,

cc:

B. J. Smith, Director

Division of Radiological Health

LaShinda Washington, HAZMAT Officer/RSO