April 8, 2005

Dear Mr. Lodhi,

I am writing in reference to the phone conversation that we had earlier this week. We would like to add Humboldt's sources to our license (07-13947-01), so that we may work with one of their moisture density gauges to see if we would like to purchase one. The Humboldt sources are as follows: Cesium 137 sealed Sources AEA Technology Model CDC.805 HIS Drawing 2200064 and Americium 241 sealed Source AEA Technology Model AMN. V997 HIS Drawing 2200067. I also need the Radiation Safety Officer for this license changed to Christine A. Minner. I am enclosing a copy of our license. If you have any question please feel free to contact me. Thank you for all of your help.

Sincerely,

Christine A. Minner

**Independent Assurance Supervisor** DelDOT Materials & Research

Phone: (302) 760-2463

Christine A. Mume

Fax: (302) 739-5270

Si

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

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Amendment No. 14

## **MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

State of Delaware
 Department of Transportation
 Materials & Research

2. Administration Center

P.O. Box 778

Dover, Delaware 19903

In accordance with letter received

February 2, 2004,

3. License number 07-13947-01 is amended in

its entirety to read as follows:

- 4. Expiration date April 30, 2012
- 5. Docket No. 030-03882 Reference No.

- 6. Byproduct, source, and/or special nuclear material
- A. Cesium 137

B. Americium 241

Citemical and/or physical form

Sealed Sources (Amersham Corp. Models CDCVW356; Isotope Products Laboratories Models HEG-0056 and C HEG-13 (1997) Troxies Drawing

B. Sealed Sources (Amersham Corp. Model AMNV.997; Isotope Products Laboratories Models 3021 and 3027; and Troxler Drawing Nos. A-102451 and A-102113)

- 8. Maximum amount that licensee may possess at any one time under this flicense
- A. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State
- B. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State

- 9. Authorized use:
- A. and B. For measuring physical properties of materials, in portable gauging devices that have been registered either with U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with a Commission or Agreement State specific license authorizing distribution to persons specifically authorized by an Commission or Agreement State license to receive, possess, and use the devices.

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## CONDITIONS

- 10. Licensed material may be used or stored at the licensee's facilities located at Delaware DOT Materials & Research Building, Bay Road, Dover, Delaware; Delaware of Department of Transportation, 800 Bay Road, Dover, Delaware; and North Project Field Control Office, Highway Maintenance Yard, 501 Newport Gap Pike, Newport, Delaware, and may be used at temporary job sites of the licensee anywhere in the State of Delaware.
- 11. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the application dated March 22, 2002.
- 12. The Radiation Safety Officer for this license is Al Strauss.

**MATERIALS LICENSE** 

SUPPLEMENTARY SHEET

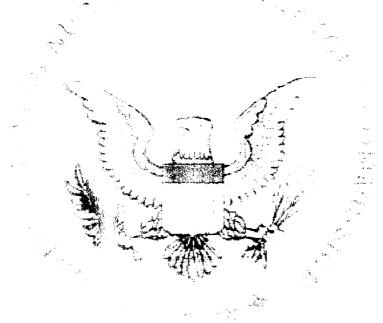
- 13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d), 40.36(b), and 70.25(d) for establishing financial assurance for decommissioning.
- 14. A. Sealed sources shall be tested for leakage and be contamination at intervals not to exceed the intervals specified in the certificate of registration source by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.
  - B. In the absence of a certificate from a transferor increating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent fegulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.
  - C. Sealed sources need not be tested if they are in storage and are not being used; however, when they are removed from storage for use or transferred to another person and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
  - D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.

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- E. Tests for leakage and/or contamination, limited to leak test sample collection, shall be performed by the licensee or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is not authorized to perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- 15. Sealed sources or source rods containing licensed material shall not be opened or sources removed or detached from source rods or gauges by the licensee, except as specifically authorized.
- 16. The licensee shall conduct a physical inventory every six months, or at other interval approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license.
- 17. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport or storage for when not under the direct surveillance of an authorized user.
- 18. Any cleaning, maintenance, or repair of the gauges that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- 19. A. If the licensee uses unshielded, called sources extended more than 3 feet below the surface, the licensee shall use surface casing that extended on the lowest depth to 12 inches above the surface and other appropriate procedures to reduce the probability of the source or probe becoming lodged below the surface. If it is not feasible to extend the casing 12 inches above the surface, the licensee shall implement procedures to ensure that the cased hole is free of obstruction before making measurements.
  - B. If a sealed source or a probe containing sealed sources becomes lodged below the surface and it becomes apparent that efforts to recover the sealed source or probe may not be successful, the licensee shall notify the U.S. Nuclear Regulatory Commission and submit the report required by 10 CFR 30.50(b)(2) and (c). The licensee shall not abandon the sealed source or probe without obtaining the Commission's prior written consent.
- 20. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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- 21. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
  - A. Application dated March 22, 2002
  - B. Facsimile received on April 1, 2002



Ву

For the U.S. Nuclear Regulatory Commission

Date <u>March 9, 2004</u>

Original signed by John R. McGrath

John R. McGrath Nuclear Materials Safety Branch 2 Division of Nuclear Materials Safety Region I King of Prussia, Pennsylvania 19406

64838710

This is to acknowledge the receipt of your letter/application dated  48205, and to inform you that the initial processing which includes an administrative review has been performed.  There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.				
Please provide to this office within 30 days of your receipt of this card				
Branch, who will contact you separately	-10.0			
Your action has been assigned Mail Control Number 13686.  When calling to inquire about this action, please refer to this control number.  You may call us on (610) 337-5398, or 337-5260.				
• /	erely, nsing Assistance Team Leader			

	: (FOR LFMS USE) : INFORMATION FROM LTS
BETWEEN:	:
License Fee Management Branch, ARM and Regional Licensing Sections	: Program Code: 03121 Status Code: 0 Fee Category: 3P Exp. Date: 20120430 Fee Comments: STATE Decom Fin Assur Reqd: N
LICENSE FEE TRANSMITTAL	
A. REGION T	
1. APPLICATION ATTACHED Applicant/Licensee: DELAWARE, STAT Received Date: 20050413 Docket No: 3003882 Control No.: 136867 License No.: 07-13947-01 Action Type: Amendment	PE OF
2. FEE ATTACHED Amount: Check No.:	
3. COMMENTS Signed _ Date _	Reference funed
B. LICENSE FEE MANAGEMENT BRANCH (Check	when milestone 03 is entered //)
1. Fee Category and Amount:	
2. Correct Fee Paid. Application may Amendment Renewal License	be processed for:
3. OTHER	
Signed	<del></del>

Date \_\_\_\_