UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

January 5, 2010

EA-09-322

Mr. Grant Hinde
Radiation Safety Officer
Jefferson Asphalt Company
P.O. Box 104868
Jefferson City, MO 65110-4868

SUBJECT: EXERCISE OF ENFORCEMENT DISCRETION – JEFFERSON ASPHALT COMPANY

Dear Mr. Hinde:

This letter refers to your letter dated September 28, 2008, which the U.S. Nuclear Regulatory Commission (NRC) received from you on October 2, 2009, requesting an amendment to License No. 24-32390-01. The request was to add up to three portable gauging devices, each of which utilizes a nominal 4.5 millicurie sealed source of radium-226 for measuring physical properties of materials at temporary job sites where the NRC maintains jurisdiction for regulating the use of licensed material. Amendment No. 04, to the subject license, was issued on December 31, 2009, adding the portable gauge, containing the radium-226 sealed source, to the license as requested. During the review of your amendment request, a potential violation of 10 CFR 30.3(c)(2) was identified regarding the failure to request, in a timely manner, an amendment to your license to possess radium-226.

The Energy Policy Act of 2005 (EPAct) expanded the definition of byproduct material to include Naturally occurring and Accelerator produced Radioactive Materials (NARM) and placed the material under the NRC's jurisdiction. In accordance with the EPAct, the NRC issued a waiver on August 31, 2005, allowing the continued use and possession of NARM while the NRC developed a regulatory framework for the regulation of the new byproduct material. On October 1, 2007, the NRC published a Federal Register Notice informing licensees of amendments to the NRC's regulation regarding the possession and use of NARM. On March 18, 2008, the NRC published a Notice of Waiver Termination for licensees in the State of Missouri which stated, in part, that the NRC was terminating the waiver for persons possessing accelerator-produced radioactive material or discrete sources of radium-226 on September 30, 2008. The Notice further stated that the final rule allowed an additional six month period from the effective date of the final rule to apply for a license amendment, i.e., March 31, 2009.

Based on the above, the NRC has determined that a violation of the NRC requirements occurred. The violation involved the failure to apply for a license amendment by March 31, 2009, and amend your NRC license to include possession of radium-226. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol. html. The possession of this type and quantity of radioactive material not authorized on an NRC license is normally characterized as a Severity Level IV violation in accordance with the NRC Enforcement Policy. Notwithstanding the issuance of the Federal Register Notice, it is recognized that some entities may not have been aware of the new

regulatory requirements. After considering the information developed during the review of your license application, the NRC has determined to use enforcement discretion, in accordance with Enforcement Guidance Memorandum 09-004, to not issue a violation for failure to submit a license application on or before March 31, 2009, to include NARM activities.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken, i.e., submission of an amendment request to correct the violation and prevent recurrence is already adequately addressed on the docket in this letter. Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your position (pursuant to 10 CFR 2.201). In that case, or if you choose to provide additional information, you should clearly mark your response as a "Reply to an Exercise of Enforcement Discretion, EA-09-322" and send it to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to (1) the Regional Administrator and the Enforcement Officer, Region III; and (2) the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Please also note that Condition 21 has been added to your license. This does not impose any new requirements, but highlights the regulatory requirements for particular conditions of use for the gauges. Contact Patricia Pelke, Chief, Materials Licensing Branch, with any questions. Ms. Pelke can be reached at telephone number (630) 829-9868.

Sincerely,

/RA/

Steven A. Reynolds, Director
Division of Nuclear Materials Safety

Docket No.: 030-35988
License No.: 24-32390-01

Enclosure:
Amendment No. 04

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 04

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	In accordance with letter received **October 2, 2009,**
1. Jefferson Asphalt Company	3. License number 24-32390-01 is amended in its entirety to read as follows:
2. P.O. Box 104868 Jefferson City, MO 65110-4868	4. Expiration date April 30, 2012
	5. Docket No. 030-35988 Reference No.

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Americium-241	A. Sealed source (Troxler Model No. AMNV.340)	A. 1 source not to exceed 100 millicuries.
B. Americium-241	B. Sealed sources (Humboldt Scientific, Inc. HSI Drawing 2200067)	B. 6 sources not to exceed 44 millicuires each.
C. Cesium-137	C. Sealed sources (Humboldt Scientific, Inc., HSI Drawing No. 2200064)	C. 6 sources not to exceed 11 millicuries each.
D. Radium-226	**D. Sealed sources (Radium Chemical Co. Drawing 21.94 and AEA Technology Model RAN.C1)**	**D. 3 sources not to exceed 4.5 millicuries each**

9. Authorized use

A. To be used in a Troxler Model 3241-C Asphalt Content gauge for measuring physical properties of materials.

B. and C. To be used in Humboldt Scientific, Inc. Model 5001 moisture density gauges.

D. To be used in Seaman Nuclear Corporation Models C-200 and C-300 portable gauging devices for measuring physical properties of materials.

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CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at 2606 West Edgewood, Jefferson City, Missouri, and may be used at temporary job sites of the licensee anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.

11. The Radiation Safety Officer (RSO) for this license is Grant Hinde.

12. Licensed material shall only be used by, or under the supervision and in the physical presence of, individuals who have received the training described in facsimile letter dated April 15, 2002.

13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by NRC under 10 CFR 32.210 or by an Agreement State.

    B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by NRC under 10 CFR 32.210 or by an Agreement State prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

    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.

    E. Tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services. In addition, the licensee is authorized to collect leak test samples but not perform the analysis: analysis of leak samples must be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

    F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.

14 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.

15. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from NRC before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Certificates of Registration issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.

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16. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by NRC, to account for all sources and/or devices received and possessed under the license.

17. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

18. 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 decommissioning financial assurance.

19. 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. A minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal whenever the portable gauge is not under the control and constant surveillance of the licensee are required.

20. 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 other persons specifically licensed by the Commission or an Agreement State to perform such services.

21. **A. If the licensee uses unshielded sealed sources extended more than 3 feet below the surface, the licensee shall use surface casing that extends from 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.

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22. 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 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 April 4, 2002; and

B. Facsimile letters dated April 15, 2002, April 16, 2002, June 10, 2002 and May 6, 2008; and

C. Letter dated May 16, 2002.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date DEC 31 2009

By Colleen Carol Casey
Colleen Carol Casey
Materials Licensing Branch
Region III