NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 23

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. PC 03120

317204

Licensee	
1. Holcim (US) Inc.	In accordance with the letter dated **May 21, 2008,**
2. 14738 Highway 79 North Clarksville, MO 63336	3. License number 24-11511-01 is amended in its entirety to read as follows:
	4. Expiration date May 31, 2014
	5. Docket No. 030-05129 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. Cesium-137	A. Sealed sources	A. See Item 9.A. **Total activity 1 curie.**
B. Californium-252	B. Sealed sources (Frontier Technology Corp. Model Nos. 10, 10S, 100, 100S; Amersham Corporation Model No. CVN.CY6; AEA Technology Model No. CVN.CY6; **FSUE State Scientific Center of Russia, Research Institute of Atomic Reactors, Division of Radionuclide Sources and Preparations, Model HK252M41))**	B. 80 micrograms (43 millicuries), in 4 sources total for low hydrogenous material; 38 micrograms (22 millicuries), in 4 sources total for hydrogenous material

9. Authorized Use:

A. For possession and use in Texas Nuclear devices which shall be used in accordance with the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State and which has been distributed in accordance with a Commission or Agreement State specific license authorizing distribution to persons specifically authorized by a Commission or Agreement State license to receive, possess, and use the device.

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B. For possession and use in a Thermo Electron Corporation Model **CBX** Cross-Belt Elemental Analyzer for the measurement of the elemental composition of bulk solid materials. The gauging device shall be used in accordance with the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State and which has been distributed in accordance with a Commission or Agreement State specific license authorizing distribution to persons specifically authorized by a Commission or Agreement State license to receive, possess, and use the device.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 14738 Highway 79 North, Clarksville, Missouri.

11. A. The Radiation Safety Officer for this license is Orval (Joe) Gray.

    B. The Assistant Radiation Safety Officer for this license is Barton Mabry.

    C. Before assuming the duties and responsibilities as RSO for this license, the individual shall have successfully completed one of the training courses described in Criteria in Section 8.7.1 of NUREG-1556, Volume 4, dated October 1998.

12. Licensed material shall be used by, or under the supervision of, Orval (Joe) Gray.

13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals as specified by the certificate of registration issued by the U.S. Nuclear Regulatory Commission 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 the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the 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(b)(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. The licensee is authorized to collect leak test samples for analysis by the device manufacturer. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

14. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.

15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

16. A. Installation, initial radiation surveys, relocation, removal from service, alignment, and replacement of gauges in Subitem No. 6.A. shall be performed only by Orval (Joe) Gray or by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

B. The following services shall not be performed by the licensee: dismantling, replacement of the sealed sources and non-routine maintenance or repair of components related to the radiological safety of the gauges. These services shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

17. A. The licensee may maintain, repair or replace device components that are not related to the radiological safety of the device containing byproduct material and that do not result in the potential for any portion of the body to come into contact with the primary beam or in increased radiation levels in accessible areas.

B. The licensee may not maintain, repair, or replace any of the following device components: the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, or shielding, or any other component related to the radiological safety of the device, except as provided otherwise by specific condition of this license.

18. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above and below the gauge with the shutter open. This survey shall be performed by the licensee or other persons authorized to perform such services by the Commission or an Agreement State.

19. The licensee shall operate each gauge within the manufacturer's specified temperature and/or environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.

20. The licensee shall assure that the shutter mechanism is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify as appropriate its "lock-out" procedures whenever a new gauge is obtained to incorporate the device manufacturer's recommendations.

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21. A. Each gauge shall be tested for the proper operation of the on-off mechanism (shutter) and indicator, if any, at intervals not to exceed 6-months or at such longer intervals as specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or the equivalent regulations of an Agreement State.

    B. Notwithstanding the periodic on-off mechanism (shutter) and indicator test, the requirement does not apply to gauges that are stored, not being used, and have the shutter lock mechanism in a locked position. The gauges exempted from this periodic test shall be tested before use.

22. The licensee may initially mount a gauge if permitted by the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State and under the following conditions:

    A. the gauge must be mounted in accordance with written instruction provided by the manufacturer;

    B. the gauge must be mounted in a location compatible with the "Conditions of Normal Use: and "Limitations and/or Other Considerations of Use" in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State;

    C. the on-off mechanism (shutter) must be locked in the "off" position, if applicable, or the source must be otherwise fully shielded;

    D. the gauges must be received in good condition (i.e., package was not damaged); and,

    E. the gauge must not require any modification to fit in the proposed location.

23. Prior to initial use and after installation, relocation, dismantling, alignment or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above, and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the U.S. Nuclear Regulatory Commission or an Agreement State.

24. The licensee shall operate each device containing licensed material within the manufacturer's specified temperature and environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.

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25. 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. Applications dated December 17, 2003 (excluding: request for Orval Gray to perform leak test analysis; Attachment 20 (shipping form) and all letters pertaining to transfer of gauges; request for Assistant RSO, (currently Alasdair Gilvray) to perform non-routine maintenance operations), March 31, 2004 and October 25, 2004;

    B. Letters dated December 10, 2003, March 29, 2004, and two letters both dated October 19, 2004; and

    C. Facsimile dated December 16, 2004.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date AUG 14 2008

By William P. Reichhold
William P. Reichhold
Materials Licensing Branch
Region III