

**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.

<p>Licensee</p> <p>1. Shaw Environmental &amp; Infrastructure, Inc.</p> <p>2. 150 Royall Street Canton, Massachusetts 02021</p>	<p>In accordance with the letter dated August 24, 2012,</p> <p>3. License number 20-31340-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date January 31, 2019</p> <hr/> <p>5. Docket No. 03037850 Reference No. 05-29228-01</p>
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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
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(b)(7)(F)

Exemption 7F

9. Authorized use:

A. through D. For receipt, storage, use and/or possession incident to any activities as follows:

- (1) Decontamination of facilities, equipment or containers;
- (2) Solidification and treatment of wastes;
- (3) Packaging for transport;
- (4) Any activity related to site characterization; and
- (5) Transport, in packages or containers approved for use under the provisions of 10 CFR 71, for transfer to licensees authorized to receive materials, in accordance with the terms and conditions of licenses issued by the NRC or an Agreement State.

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**CONDITIONS**

10. Licensed material may be used only 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, including areas of exclusive Federal jurisdiction within Agreement States.

If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the Federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

11. The Radiation Safety Officer for this license is Mark O. Somerville, Ph.D., CHP, REA.
12. Licensed material shall be used by, or under the supervision of, individuals who have received the training described in application dated October 21, 2008, and have been designated, in writing, by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.
13. Except for calibration sources, reference standards, and radioactively contaminated equipment, possession of licensed material at each temporary job site shall be limited to material originating from each site. This material must either be transferred to an authorized recipient or remain at the site after activities authorized by this license are completed.
14. This license does not authorize the use of licensed material at temporary job sites for uses already specifically authorized by the customer's license. If a customer also holds a license issued by the NRC or an Agreement State, the licensee shall establish a written agreement between the licensee and the customer specifying which licensed activities shall be performed under the customer's license and supervision, and which licensed activities shall be performed under the licensee's supervision pursuant to this license. The agreement shall include a commitment by the licensee and customer to ensure safety, and any commitments by the licensee to help the customer clean up the temporary job site if there is an accident. A copy of this agreement shall be included in the notification required by Condition 15.A. of this license.
15. A. At least 14 days before initiating activities at a temporary job site, the licensee shall notify, in writing, the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, ATTN: Director, Division of Nuclear Materials Safety, 2100 Renaissance Boulevard, Suite 100, King of Prussia, Pennsylvania 19406. The notification shall include the following information:
- (1) Estimated type, quantity, and physical/chemical form(s) of material;
  - (2) Specification of site location;
  - (3) Description of project activities including waste management and disposition;

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- (4) Estimated project start date and duration; and
  - (5) Identification of, and information on how to contact, key project personnel.
- B. Within 30 days of completing activities at each job site location, the licensee shall notify, in writing, the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, ATTN: Director, Division of Nuclear Materials Safety, 2100 Renaissance Boulevard, Suite 100, King of Prussia, Pennsylvania 19406, of the temporary job site status and disposition of any licensed material used.
16. Pursuant to 10 CFR Parts 30.11, 40.14, 70.14, and Conditions 10 and 13 of this license, the licensee is exempted from the requirements of 10 CFR Parts 30.35, 40.36, and 70.25 to establish decommissioning financial assurance.
17. The licensee shall maintain records of information important to decommissioning each temporary job site. At the applicable job site pursuant to 10 CFR Parts 30.35(g), 40.36(f), and 70.25(g). The records shall be made available to the customer upon request. At the completion of activities at a temporary job site, the licensee shall transfer these records to the customer for retention.
18. Notwithstanding the requirements of 10 CFR Parts 30.32(i), 40.31(j); and 70.22(i), the licensee is not required to establish an emergency plan. Before taking possession of licensed material at a temporary job site in quantities requiring an emergency plan, the licensee shall either
- A. Obtain NRC approval of an evaluation demonstrating that an emergency plan is not required pursuant to 10 CFR Parts 30.32(i), 40.31(j), and 70.22(i); or
  - B. Submit written confirmation to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, ATTN: Director, Division of Nuclear Materials Safety, 2100 Renaissance Boulevard, Suite 100, King of Prussia, Pennsylvania 19406, that licensee personnel have been trained and will follow the provision of an existing emergency plan approved by the NRC or an Agreement State for the temporary job site.
19. If approved by the Radiation Safety Officer specifically identified in this license, the licensee may take reasonable action in an emergency that departs from conditions in this license when action is immediately needed to protect public health and safety and no action consistent with all license conditions that can provide adequate or equivalent protection is immediately apparent. The licensee shall notify the NRC before, if practicable, and in any case, immediately after taking such emergency action using reporting procedure specified in 10 CFR 30.50(c).
20. The licensee shall not use licensed material in or on human beings.
21. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed six

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- months or at the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to primarily emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
  - C. 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 under equivalent regulations 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.
  - D. Sealed sources need not be tested if they contain only hydrogen-3; or they contain only a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta- and/or gamma-emitting material or not more than 10 microcuries of alpha-emitting material.
  - E. 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.
  - F. 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.
  - G. Tests for leakage and/or contamination, including leak test sample collection and analysis, 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.
  - H. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
22. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
23. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the

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U.S. Nuclear Regulatory Commission, 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.

24.

(b)(7)(F)

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

26. Except as specifically provided otherwise in this license, the licensee shall conduct its program in

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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 October 21, 2008 (ML083050628)
- B. Letter dated December 17, 2000 (ML090050089)
- C. Letter dated August 15, 2011 (ML112311753)

For the U.S. Nuclear Regulatory Commission

**Original signed by Stephen Hammann**

Date November 14, 2012

By \_\_\_\_\_  
Stephen Hammann  
Decommissioning Branch  
Division of Nuclear Materials Safety  
Region I  
King of Prussia, Pennsylvania 19406