

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
RADIOACTIVE MATERIAL LICENSE**

Pursuant to the Atomic Energy and Radiation Control Act, Section 13-7-40 et seq. of S.C. Code of Laws of 1976, as amended, and Supplements thereto, and the South Carolina Department of Health and Environmental Control Regulation 61-63, Radioactive Material (Title A), and in reliance on statements and representations heretofore made by the applicant, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the South Carolina Department of Health and Environmental Control now or hereafter in effect and to any conditions specified below:

Amendment No. 35 amends:

LICENSEE		
1. Name: EnergySolutions, LLC Nuclear Services Support Facility	3. License Number: 287-02 in its entirety.	
2. Address: 740 Osborn Road Barnwell, South Carolina 29812	4. Expiration Date: April 30, 2015	
5. Radioactive Material (Element & Mass No.)	6. Chemical and/or Physical Form	7. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.
A. Any radioactive material with Atomic Nos. 1-92 inclusive.	A. Any Form	A. 10.0 curies total of all radionuclides.
B. Any radioactive material with Atomic Nos. 93 and above.	B. Any Form	B. 10.0 millicuries total of all radionuclides.
C. Any radioactive material Atomic Nos. 1-92 inclusive.	C. Any Form	C. 5,000 curies total of with all radionuclides.
D. Source material	D. Any Form	D. 1,000 pounds total.
E. Any radioactive material with Atomic Nos. 93 and above (except SNM)	E. Any Form	E. 100 grams total.
F. Special Nuclear Materials	F. Any form	F. 100 grams total.

8. Authorized Use:

- A. Radioactive materials as contamination consisting of activation, corrosion and/or fission products upon surfaces or contained within tools, equipment, or components used in the maintenance, repair, testing, decontamination and waste processing functions of the Nuclear Services Support Facility.
- B. Radioactive materials as incidental contamination on the surfaces or within tools, equipment, or components used in the maintenance, repair, testing, decontamination and waste processing functions of the Nuclear Services Division.

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C&D. Radioactive materials and/or radioactive waste for receipt, processing, decontamination, storage, consolidation, solidification, encapsulation, and repackaging for transport to authorized licenses.

E&F. Radioactive material only incident to the radioactive materials of Item C.&D.

CONDITIONS

9. Radioactive material may be used at the licensee's site on Osborn Road, Barnwell, South Carolina.

10. The licensee shall comply with the provisions of Title A, State of South Carolina Rules and Regulations for Radiation Control, Part I - General Provisions; Part III - Standards for Protection Against Radiation; and Part VI - Notices, Instructions, and Reports to Workers; Inspections.

11. A. The licensee shall comply with the requirements described in Nuclear Regulatory Commission (NRC) Order EA-07-305 with attachments dated December 5, 2007 entitled "Fingerprinting and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material." The requirements listed in the NRC Order shall be implemented as part of the trustworthiness and reliability program of the increased controls requirement.

B. Within 90 days after the effective date of this amendment, the licensee shall provide under oath or affirmation, a certification that the Trustworthiness and Reliability Official is deemed trustworthy and reliable by the licensee as required in paragraph B.2 of the NRC Order EA-07-305, published in the Federal Register on December 13, 2007 [72 FR 70901].

C. All fingerprints obtained by the licensee pursuant to this requirement must be submitted to the NRC for transmission to the US Federal Bureau of Investigation (FBI). Additionally, the licensee's submission of fingerprints shall also be accompanied by a certification, under oath and affirmation, of the trustworthiness and reliability of the Trustworthiness and Reliability Official as required by paragraph B.2. of NRC Order EA-07-305.

D. The licensee shall complete implementation of the fingerprinting requirements by 180 days after the effective date of this amendment. The licensee shall notify the Department when they have achieved full compliance with the requirements described in the NRC Order. The notification shall be made in writing to the Director, Division of Waste Management, Bureau of Land and Waste Management, within 25 days after full compliance has been achieved.

E. The licensee shall notify the Department within 24 hours if the results from a criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.

12. Radioactive material shall be used by or under the supervision of Joseph J. Still (RSO), Clifford E. Bowers, Daniel B. Morris, Robert W. Defrenn, Jerry M. Williams, Gregory Brant, Hendrick B. Fisher or other individuals designated by the Radiation Safety Officer upon successful completion of the licensee's training program and approved by the licensee's Safety Review Board.

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13. The transportation of radioactive materials and radioactive waste within the State of South Carolina shall be in accordance with applicable regulations of the U.S. Department of Transportation, the U.S. Nuclear Regulatory Commission, Section RHA 2.22, and Appendix D, RHA 3.55, Department Regulation 61-63, Radioactive Material (Title A), and Department Regulation 61-83, Transportation of Radioactive Waste Into or Within South Carolina.

14. Radioactive waste shall be processed and packaged in accordance with applicable licenses issued by the U.S. Nuclear Regulatory Commission or an Agreement State to which radioactive material or waste will be transferred.

15. All operations authorized by this license shall be conducted in accordance with Chem-Nuclear Systems/ EnergySolutions procedures and subsequent revisions and additions by the Department. However, the licensee may, upon notification to the Department, but without Department approval, make minor changes to these procedures provided that:

A. The change does not effect requirements of any other license condition in this license;

B. The change does not increase the potential for personnel exposures;

C. The change does not diminish operational safety;

D. The change does not increase the potential for release of radioactive material to unrestricted areas, and

E. The change does not reduce the licensee's record keeping and report system. The licensee shall maintain a record of these changes including evaluations which provide the bases for the change.

16. The licensee must comply with the reporting requirements for transactions involving nationally tracked sources in Title A, Part 3, Appendix G, RHA 3.58. This section includes the requirement to report any manufacture, transfer, receipt, disassembly, or disposal of a nationally tracked source, otherwise allowed by this license, by the close of the next business day after the transaction. A nationally tracked source, as defined in Title A, RHA 3.2.63, refers to a sealed source containing a quantity equal to or greater than Category 1 or Category 2 levels of any radioactive material listed in Title A, Part 3, Appendix G, RHA 3.58, "Nationally Tracked Source Thresholds."

17. The licensee shall, to the extent necessary, continue the employment of all personnel involved in the operation of the Nuclear Services Support Facility in accordance with all requirements of the license and applicable regulations and, in the event replacement of employees becomes necessary, only individuals of comparable qualifications and experience will be hired.

18. The licensee shall make no changes in the personnel training program, the internal safety audits, Safety Review Board, ALARA Review Committee, Site Criteria, or Procedures Manual and Standard Operating Procedures, without written approval from the Department, unless otherwise specified in this license.

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19. The licensee shall not accept radioactive waste for storage or processing unless the shipper has provided for the waste shipment on a Barnwell Waste Management Facility's Uniform Low-Level Radioactive Waste Manifest form. The Department thereto shall approve such form or revisions.
20. The licensee shall not accept radioactive waste for storage or processing unless the shipper of such waste has a valid, unsuspended Radioactive Waste Transport Permit issued by the S.C. Department of Health and Environmental Control unless exempted by the Department.
21. The licensee shall not accept radioactive waste for storage or processing unless the shipper has provided a properly executed Department Form, DHEC-803, Radioactive Waste Shipment Certification form, Parts I and II. A properly completed and executed Department Form, DHEC-802, Radioactive Waste Shipment Prior Notification and Manifest Form shall also accompany shipments consisting of more than 75 cubic feet or containing more than one (1) curie.
22. Notwithstanding other conditions of this license, the licensee shall not accept radioactive waste for storage or processing unless he has received advance written notification of any waste shipment containing unusual hazards or potential hazards including but not limited to, physical, gaseous, chemical, pyrophoric, or excessive removable contamination on containers shipped inside casks or excessive internally contaminated casks, and unexpected high radiation levels at container surfaces.
23. The licensee shall immediately notify the Department of any waste shipments where a violation of applicable regulations or license conditions has been found.
24. The licensee shall notify the shipper and the Department when any shipment of radioactive waste or part of a shipment has not arrived within 60 days after the advance copy of the shipment manifest or shipping papers was received by the licensee.
25. The licensee shall notify the shipper when it has been determined that a radioactive waste shipment or part of a shipment cannot be accepted for processing by the licensee.
26. The licensee shall acknowledge receipt of the waste within 7 days of its acceptance for processing by returning a signed copy of the shipment manifest or shipping papers to the shipper. The licensee shall indicate on the returned copy of the shipment manifest of shipping papers any discrepancy between waste descriptions listed on the manifest or papers and the waste materials received in the shipment.
27. The licensee shall not possess any waste package containing licensed material for more than one year from the date of receipt of the package.
28. The licensee shall notify the Department in writing sixty (60) days in advance of plans to discontinue the activities authorized by this license.
29. The licensee shall conduct a physical inventory every six (6) months to account for all radioactive material received and possessed to include the quantities and kinds of licensed material, location of radioactive materials, and the date of the inventory. Records of such inventories shall be maintained for inspection by the Department.

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30. A. Unless otherwise authorized, the licensee shall not receive for storage nor processing, any mixed low-level radioactive waste defined as waste that satisfies the definition of low-level radioactive waste specified in the Low-Level Radioactive Waste Policy Amendments Act of 1985 (P.L. 99-240), and contains waste that either (1) is listed as hazardous waste in Subpart D, 40 CFR 261, or (2) causes the waste to exhibit any of the hazardous waste characteristics identified in Subpart C, 40 CFR Part 261.

B. The licensee may however, receive waste that has been treated by acceptable methods to render it non-hazardous and therefore not subject to the jurisdiction of the Resource Conservation and Recovery Act (RCRA). Waste, which may contain discrete quantities of hazardous or toxic materials, may be evaluated for processing by the licensee and such evaluations provided to the Department for consideration of approval.

31. A. Except as specifically provided otherwise, the licensee shall possess and use radioactive material described in Items 5, 6, and 7 of this license in accordance with statements, representations, and procedures contained in the renewal application dated March 30, 2010, signed by Joseph J. Still and William B. House, Vice President, Regulatory Affairs and letter of September 8, 2011 signed by William B. House, Vice President, Regulatory Affairs.

B. The licensee shall comply with the requirements described in the S.C. Department of Health & Environmental Control letter dated November 8, 2005 and attached document entitled "Increased Controls for Licensees that Possess Sources Containing Radioactive Material Quantities of Concern". The licensee shall complete implementation of said requirements within 6 months from the issuance of the license amendment or the first day that radionuclides in quantities of concern are possessed at or above the limits specified in Table 1 of the attachment, whichever is later. Within 25 days after the implementation of the requirements of this condition, the licensee shall notify the Director, Division of Waste Management, Bureau of Land & Waste Management, in writing that it has completed the requirements of this condition.

Date of Issuance September 22, 2011

For the South Carolina Department
Of Health and Environmental Control
By: Richard A. Haynes
Richard A. Haynes, PE, Director
Division of Waste Management
Bureau of Land & Waste Management