

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, 37, 39, 40, 70 and 71, 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. IES Downstream LLC</p> <p>2. 91-480 Malakole Street Kapolei, HI 96707</p>	<p>In accordance with letters dated June 14, 2016 and July 29, 2016</p> <p>3. License number: 53-35137-01 is amended in its entirety to read as follows:</p>	<p>4. Expiration Date: April 30, 2024</p> <p>5. Docket No.: 030-38728 Reference No.: 53-35109-01, 030-38689</p>
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Gadolinium-153</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed Sources (Belden Engineering, Model PHG153M13.410)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 1.3 curies per source and 2.6 curies total</p> <p>9. Authorized use</p> <p>A. To be used to obtain real time X-ray imaging in industrial radiography using Lixi, Inc. Model LS-82X portable fluoroscopes devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.</p>

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
53-35137-01

Amendment No. 1

Docket Number 030-38728
Reference No.: 53-35109-01, 030-38689**CONDITIONS**

10. Licensed material may be used or stored only at the licensee's facilities located at:

- A. 91-480 Malakole Street, Kapolei, Hawaii (Island of Oahu), and,
- B. 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. Licensed material shall only be used by, or under the supervision of, and in the physical presence of, individuals who have received the training described in the application dated September 13, 2013, and have been designated in writing by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for 5 years following the last use of licensed material by the individual.
- 12. The Radiation Safety Officer (RSO) for this license is Kyle Toyama.
- 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 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 test results received.
 - C. 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.

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- D. The leak test shall be capable of detecting the presence of 185 becquerels (0.005 microcuries) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005 microcuries) 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. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Boulevard, Arlington, Texas 76011-4511, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
- E. Analysis of leak test samples and/or contamination shall be performed by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is authorized to collect leak test samples but not perform the analysis.
- F. Records of leak test results shall be kept in units of becquerels (microcuries) and shall be maintained for 5 years.
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, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sealed 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. Maintenance, repair, cleaning, replacement, and disposal of sealed sources shall be performed only by the device manufacturer or other persons specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
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. The licensee shall not use licensed material in or on human beings.

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19. 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 and enclosures, listed below. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. 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 September 13, 2013 (ML13277A351)
- B. Email dated December 10, 2013 with application and enclosures (ML13347B083)
- C. Letter dated June 14, 2016 (ML16175A408, ML16175A414)
- D. Letter dated July 29, 2016 with attachments (ML16214A114)



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Date: August 1, 2016

By: _____

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Nuclear Materials Safety Branch B
Region 4
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