



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

July 19, 2010

GeoTek, Inc.  
ATTN: David Waite  
Radiation Safety Officer  
320 East Corporate Drive  
Suite 300  
Meridian, Idaho 83642

SUBJECT: CORRECTED COPY OF LICENSE

Please find the attached corrected copy of Amendment Number 01 to License Number 11-27776-01. The NRC has established that all materials licenses should have maximum possession limits listed on materials licenses as recommended by the Materials Program Working Group (MPWG) of the Office of Federal and State Materials and Environmental Management Programs (FSME). Previously, your license had an "open ended" possession limit described in Item 8 of your materials license. **The attached corrected copy contains a "closed ended" possession limit, which specifies the maximum amount of activity per source and total activity allowed for each radioisotope on the license.** If you have any questions, or if the corrected copy of your license does not accurately document the amount of material that you possess, please call or email me at (817) 860-8132 or [jackie.cook@nrc.gov](mailto:jackie.cook@nrc.gov) to amend the license, as appropriate.

In accordance with 10 CRR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink that reads "Jacqueline D. Cook".

Jacqueline D. Cook, Senior Health Physicist  
Nuclear Materials Safety Branch B

Docket: 030-37206  
License: 11-27776-01

Enclosure: As stated

**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. GeoTek, Inc.</p> <p>2. 320 East Corporate Drive Suite 300 Meridian, Idaho 83642</p>	<p>In accordance with letter dated September 16, 2009</p> <p>3. License number 11-27776-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date August 31, 2014</p> <p>5. Docket No. 030-37206 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cesium-137</p> <p>B. Americium-241</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed sources (AEA Technology/QSA, Inc., Model CDCW556; Isotope Product Laboratories Model HEG-137)</p> <p>B. Sealed neutron sources (AEA Technology/QSA, Inc., Model AMNV.997; Isotope Product Laboratories Models M1, NO2, 3021 and 3027)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 9 millicuries per source and 100 millicuries total.</p> <p>B. 44 millicuries per source and 500 millicuries total.</p>
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<p>9. Authorized use:</p> <p>A. and B.</p>	<p>In Troxler Electronic Laboratories, Models 3400 Series and 3411 portable gauging devices for measuring physical properties of materials.</p>
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CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at:
- A. 320 East Corporate Drive, Suite 300, Meridian, Idaho.
  - B. Temporary job sites anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating 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.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
11-27776-01Docket or Reference Number  
030-37206Amendment No. 01  
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11. Licensed materials may be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the application dated May 27, 2004.
12. The Radiation Safety Officer (RSO) for this license is David Waite.
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 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 U.S. Nuclear Regulatory Commission 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. 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, 612 East Lamar Blvd., Suite 400, Arlington, Texas 76011-4125, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
- E. Tests for leakage 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. In addition, the licensee is authorized to collect leak test samples but not perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
- F. Records of leak tests 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. 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 sources and/or devices received and possessed under the license.

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16. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from U.S. Nuclear Regulatory Commission 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.
17. 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, storage or when not under the direct surveillance of an authorized user.
18. 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 U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
19. 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."
20. 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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21. 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. Application dated May 27, 2004

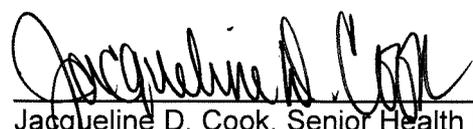
[ML041610500]



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: July 19, 2010

By: \_\_\_\_\_

  
Jacqueline D. Cook, Senior Health Physicist  
Nuclear Materials Safety Branch B  
Region IV

Arlington, Texas 76011-4125